

THE DISTRICT INSPECTOR MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL PARKER WATER AND SANITATION DISTRICT AT 303-841-4627. THE DISTRICT WILL PROVIDE PERIODIC INSPECTIONS OF THE WORK. 24 HOUR NOTICE TO THE INSPECTOR IS REQUIRED FOR SCHEDULED INSPECTIONS. ANY WORK ACCOMPLISHED WITHOUT THE APPROVAL OF THE INSPECTOR WILL BE SUBJECT TO REJECTION.

REVIEWED FOR CONFORMANCE TO PARKER WATER AND SANITATION DISTRICT STANDARDS.

BY: _____ DATE _____
(DISTRICT REPRESENTATIVE)

APPROVED FOR CONSTRUCTION:
PARKER WATER AND SANITATION DISTRICT

BY: _____ DATE _____
(DISTRICT ENGINEER)

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGN, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORT(S), FINAL DEVELOPMENT PLAN(S), SPECIAL REVIEW(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

TOWN OF PARKER, DIRECTOR OF ENGINEERING _____ DATE _____

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
A	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
⊕	PROPOSED BUTTERFLY VALVE	---	PROPERTY LINE
⊕	PROPOSED CAP WITH END OF LINE BLOWOFF	---	EDGE OF PAVEMENT
⊕	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊕	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊕	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR
⊕	PROPOSED WL FITTING WITH THRUST BLOCK	---	EXISTING 1' CONTOUR
⊕	PROPOSED FLARED END SECTION	---	PROPOSED 5' CONTOUR
⊕	PROPOSED LOW POINT BLOW-OFF	---	PROPOSED 1' CONTOUR
⊕	PROPOSED AIR VALVE	---	PROPOSED STORM DRAIN
⊕	FUTURE PHASE VALVE	---	PROPOSED SEWER LINE WITH MANHOLE
⊕	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
⊕	PROPOSED LIGHT POLE	---	PROPOSED WATER LINE
⊕	PROPOSED SIDEWALK	---	PROPOSED WATER LATERAL W/ METER
⊕	PROPOSED SIDEWALK RAMP	---	SECTION LINE
10.00	EXISTING ELEVATION	---	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	---	EXISTING FIBER OPTIC LINE
⊕	PROPOSED STORM DRAIN INLET	---	EXISTING OVERHEAD POWER
⊕	PROPOSED STORM DRAIN MANHOLE	---	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
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EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
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INV	INVERT	WL	WATER LINE
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LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

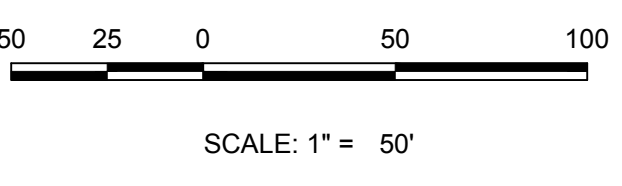
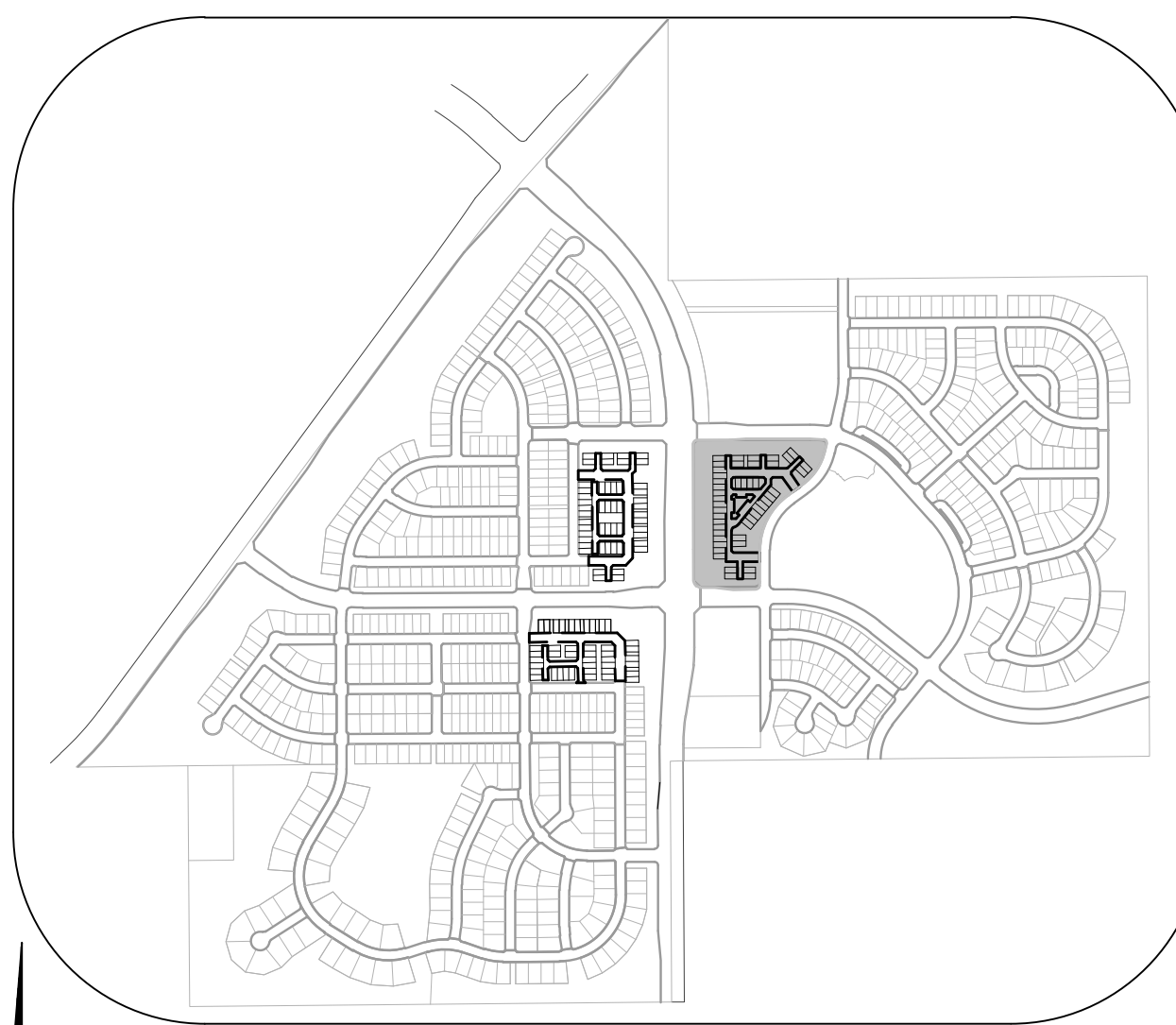
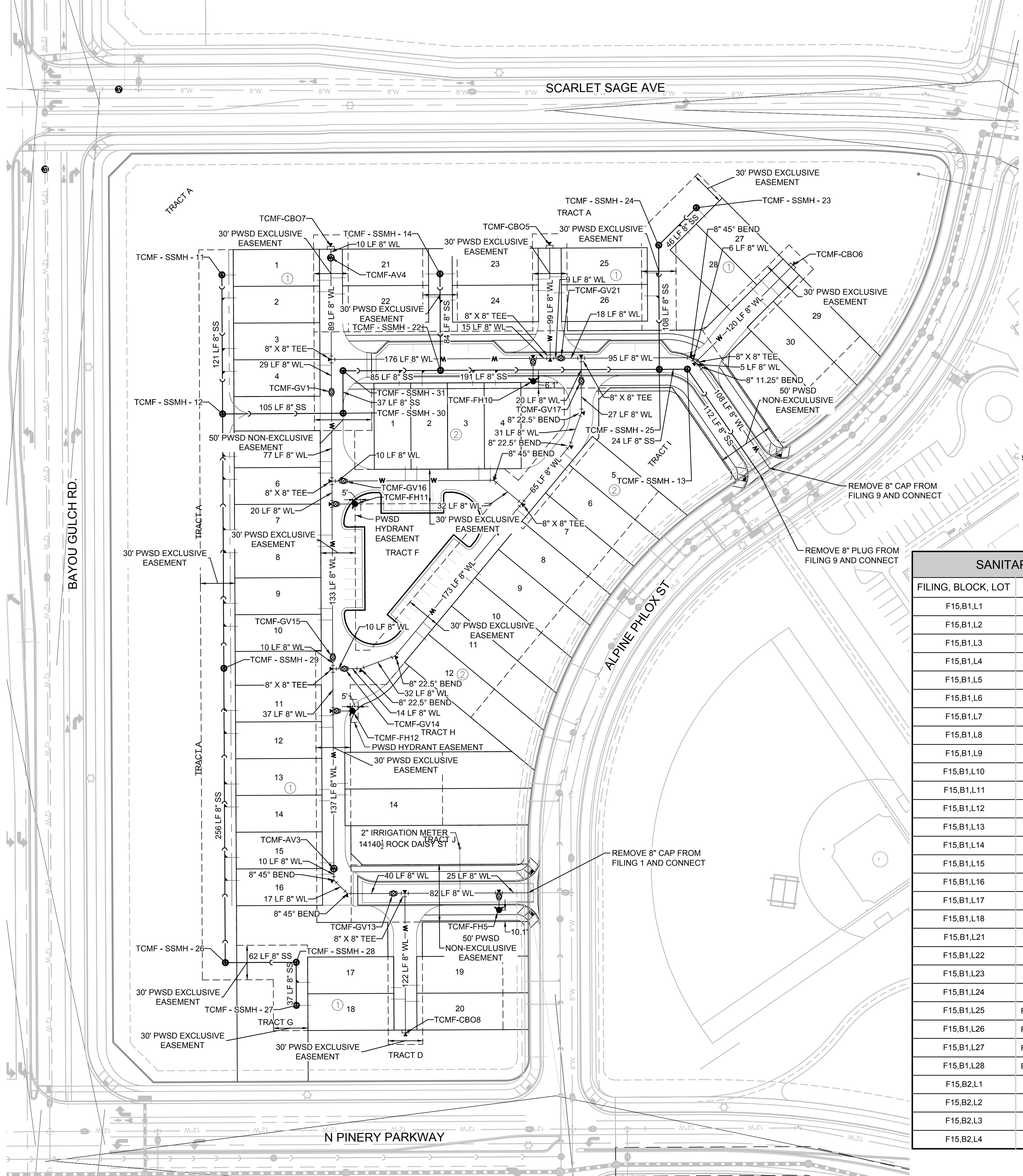
NOTES:
1. SANITARY SERVICES FOR BLOCK 1, LOTS 19-20 & 29-30 & BLOCK 2, LOTS 5-14 WILL BE INSTALLED WITH TRAILS AT CROWFOOT FILING 9.
2. THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING WORK. THE TOWN PREFERS CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE, AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE PATCHED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.
3. FIRE HYDRANT EASEMENTS ARE 5' BEHIND AND 10' TO EACH SIDE OF THE HYDRANTS.

FIRE DEPARTMENT APPROVAL
ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

(FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE) _____ DATE _____

(NOTE- UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA24 WHEN SUBMITTING FOR REVIEW.)

CALL 811
TWO WORKING DAYS
BEFORE YOU DIG
1-800-922-1987



SANITARY SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F15,B1,L1	FILING 15 SS WEST	16+98.25
F15,B1,L2	FILING 15 SS WEST	16+78.25
F15,B1,L3	FILING 15 SS WEST	16+34.25
F15,B1,L4	FILING 15 SS WEST	16+14.25
F15,B1,L5	FILING 15 SS WEST	15+40.25
F15,B1,L6	FILING 15 SS WEST	15+20.25
F15,B1,L7	FILING 15 SS WEST	14+76.25
F15,B1,L8	FILING 15 SS WEST	14+12.25
F15,B1,L9	FILING 15 SS WEST	13+92.25
F15,B1,L10	FILING 15 SS WEST	13+18.83
F15,B1,L11	FILING 15 SS WEST	12+98.83
F15,B1,L12	FILING 15 SS WEST	12+54.83
F15,B1,L13	FILING 15 SS WEST	12+34.83
F15,B1,L14	FILING 15 SS WEST	11+90.83
F15,B1,L15	FILING 15 SS WEST	11+70.83
F15,B1,L16	FILING 15 SS WEST	10+20.00
F15,B1,L17	FILING 15 SS WEST	10+00.00
F15,B1,L18	FILING 15 SS NORTH	10+84.00
F15,B1,L19	FILING 15 SS NORTH	10+64.00
F15,B1,L20	FILING 15 SS NORTH	10+84.00
F15,B1,L21	FILING 15 SS NORTH	10+64.00
F15,B1,L22	FILING 15 SS NORTH	10+64.00
F15,B1,L23	FILING 15 SS NORTH	10+84.00
F15,B1,L24	FILING 15 SS NORTH	10+61.00
F15,B1,L25	FILING 15 SS NORTHEAST	10+84.00
F15,B1,L26	FILING 15 SS NORTHEAST	10+64.00
F15,B1,L27	FILING 15 SS NORTHEAST	11+54.29
F15,B1,L28	FILING 15 SS NORTHEAST	11+34.29
F15,B2,L1	MOCK ORANGE AVE	10+59.00
F15,B2,L2	MOCK ORANGE AVE	10+79.00
F15,B2,L3	MOCK ORANGE AVE	11+23.00
F15,B2,L4	MOCK ORANGE AVE	11+43.00

WATER SERVICE TABLE		
FILING, BLOCK, LOT	STREET	STATIONING
F15,B1,L1	ROCK DAISY PT	10+27.00
F15,B1,L2	ROCK DAISY PT	10+37.00
F15,B1,L3	ROCK DAISY PT	10+91.00
F15,B1,L4	ROCK DAISY PT	11+01.00
F15,B1,L5	ROCK DAISY PT	11+85.00
F15,B1,L6	ROCK DAISY PT	11+95.00
F15,B1,L7	ROCK DAISY PT	12+49.00
F15,B1,L8	ROCK DAISY PT	12+59.00
F15,B1,L9	ROCK DAISY PT	13+13.00
F15,B1,L10	ROCK DAISY PT	13+23.00
F15,B1,L11	ROCK DAISY PT	14+06.42
F15,B1,L12	ROCK DAISY PT	14+16.42
F15,B1,L13	ROCK DAISY PT	14+70.42
F15,B1,L14	ROCK DAISY PT	14+80.42
F15,B1,L15	ROCK DAISY PT	15+34.19
F15,B1,L16	ROCK DAISY PT	15+42.76
F15,B1,L17	BLUE HEART CT	10+82.08
F15,B1,L18	BLUE HEART CT	10+92.08
F15,B1,L19	BLUE HEART CT	10+80.08
F15,B1,L20	BLUE HEART CT	10+94.08
F15,B1,L21	ROCK DAISY PT	10+25.00
F15,B1,L22	ROCK DAISY PT	10+39.00
F15,B1,L23	MOCK ORANGE WAY	10+27.00
F15,B1,L24	MOCK ORANGE WAY	10+37.00
F15,B1,L25	MOCK ORANGE WAY	10+25.00
F15,B1,L26	MOCK ORANGE WAY	10+39.00
F15,B1,L27	MOCK ORANGE CT	10+98.21
F15,B1,L28	MOCK ORANGE CT	10+88.21
F15,B1,L29	MOCK ORANGE CT	11+00.21
F15,B1,L30	MOCK ORANGE CT	10+86.21
F15,B2,L1	ROCK DAISY LN	10+64.00
F15,B2,L2	ROCK DAISY LN	10+74.00
F15,B2,L3	ROCK DAISY LN	11+27.91
F15,B2,L4	ROCK DAISY LN	11+37.07
F15,B2,L5	ROCK DAISY TRL	12+86.64
F15,B2,L6	ROCK DAISY TRL	12+76.64
F15,B2,L7	ROCK DAISY TRL	12+22.64
F15,B2,L8	ROCK DAISY TRL	12+12.64
F15,B2,L9	ROCK DAISY TRL	11+58.64
F15,B2,L10	ROCK DAISY TRL	11+48.64
F15,B2,L11	ROCK DAISY TRL	10+94.64
F15,B2,L12	ROCK DAISY TRL	10+84.64
F15,B2,L13	ROCK DAISY PT	14+65.32
F15,B2,L14	ROCK DAISY PT	14+75.32

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

BENCHMARK
DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

10333 E. Dry Creek Rd.
Suite 240
Englewood, CO 80112
Tel: (720) 482-9526
Fax: (720) 482-9546

CVL CONSULTANTS

HR 935 LLC
7363 South Alton Way
CENTENNIAL, CO 80112

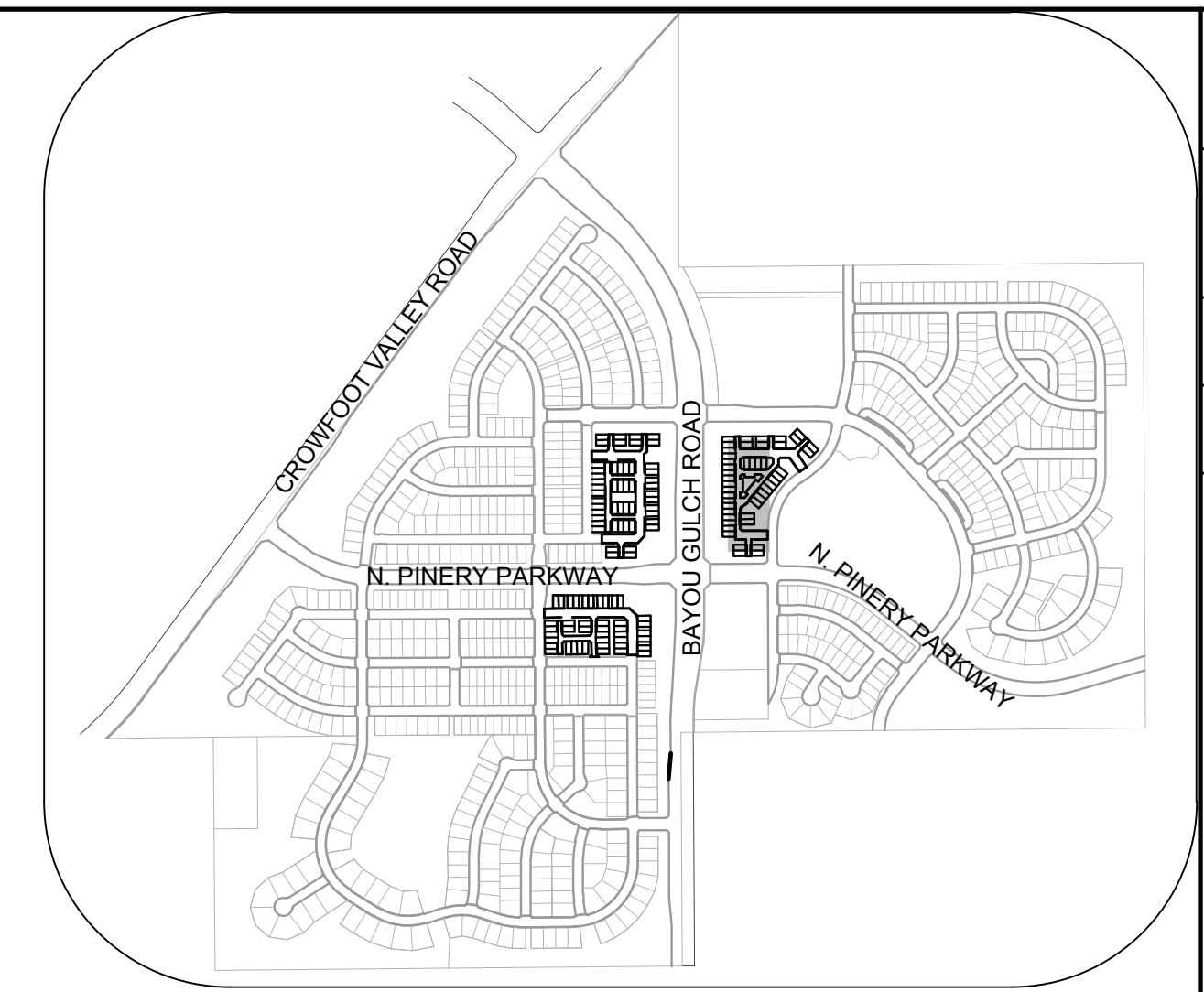
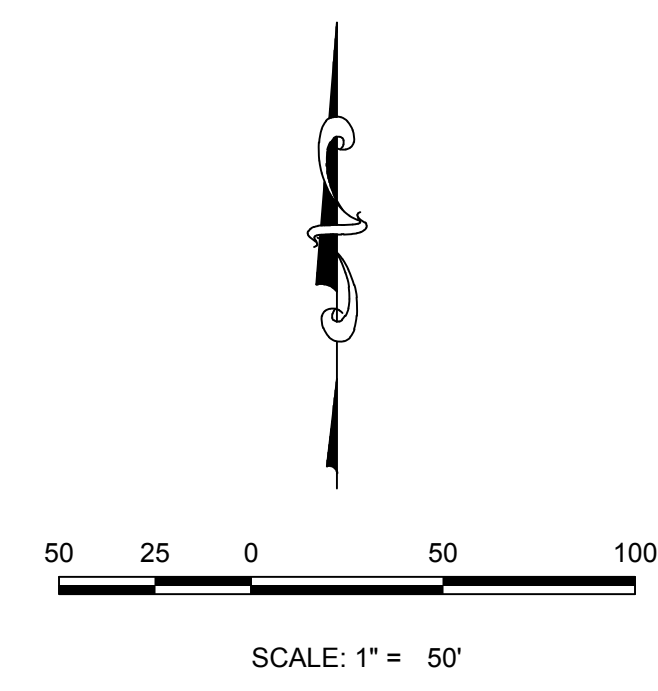
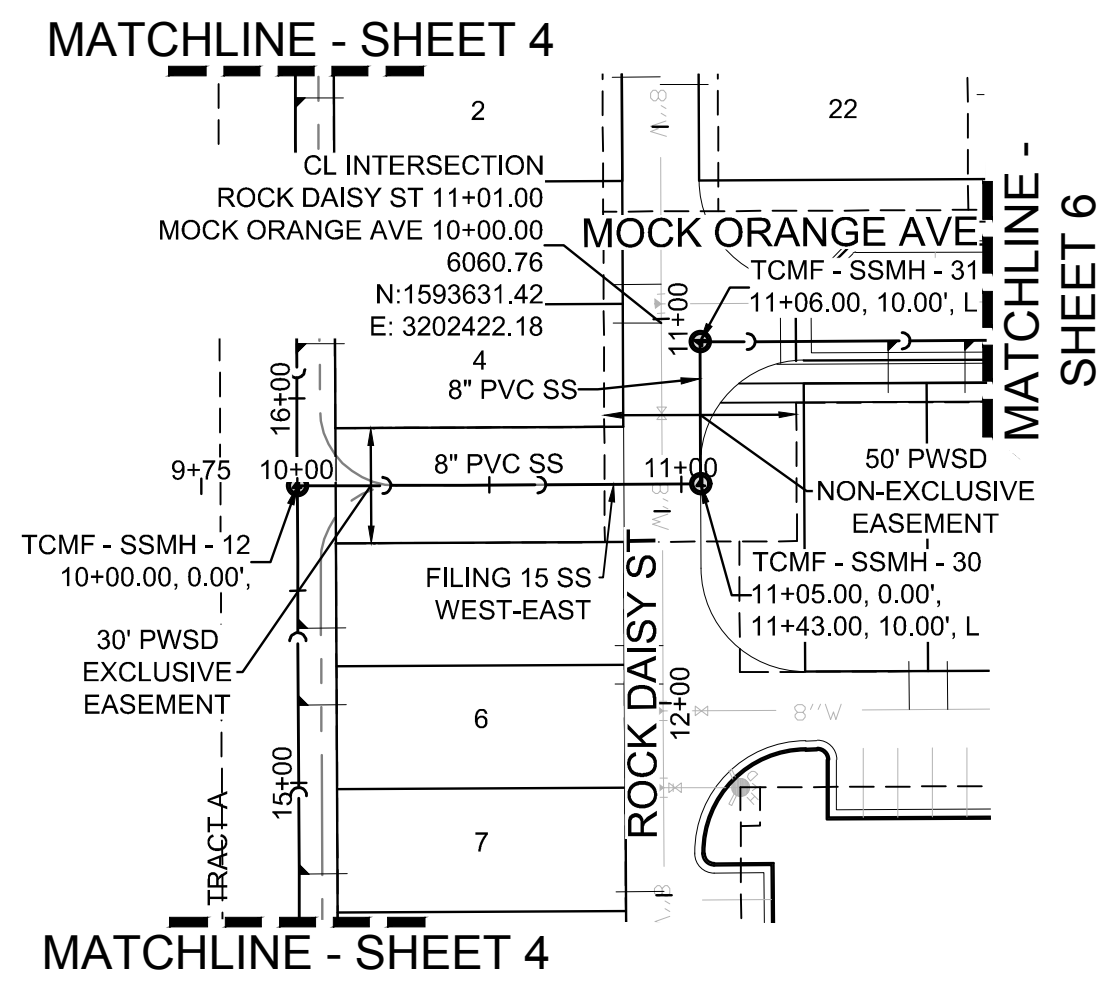
TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
AREA UTILITY PLAN

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: BPW
CHECKED BY: BPW
DATE: JUNE 2018

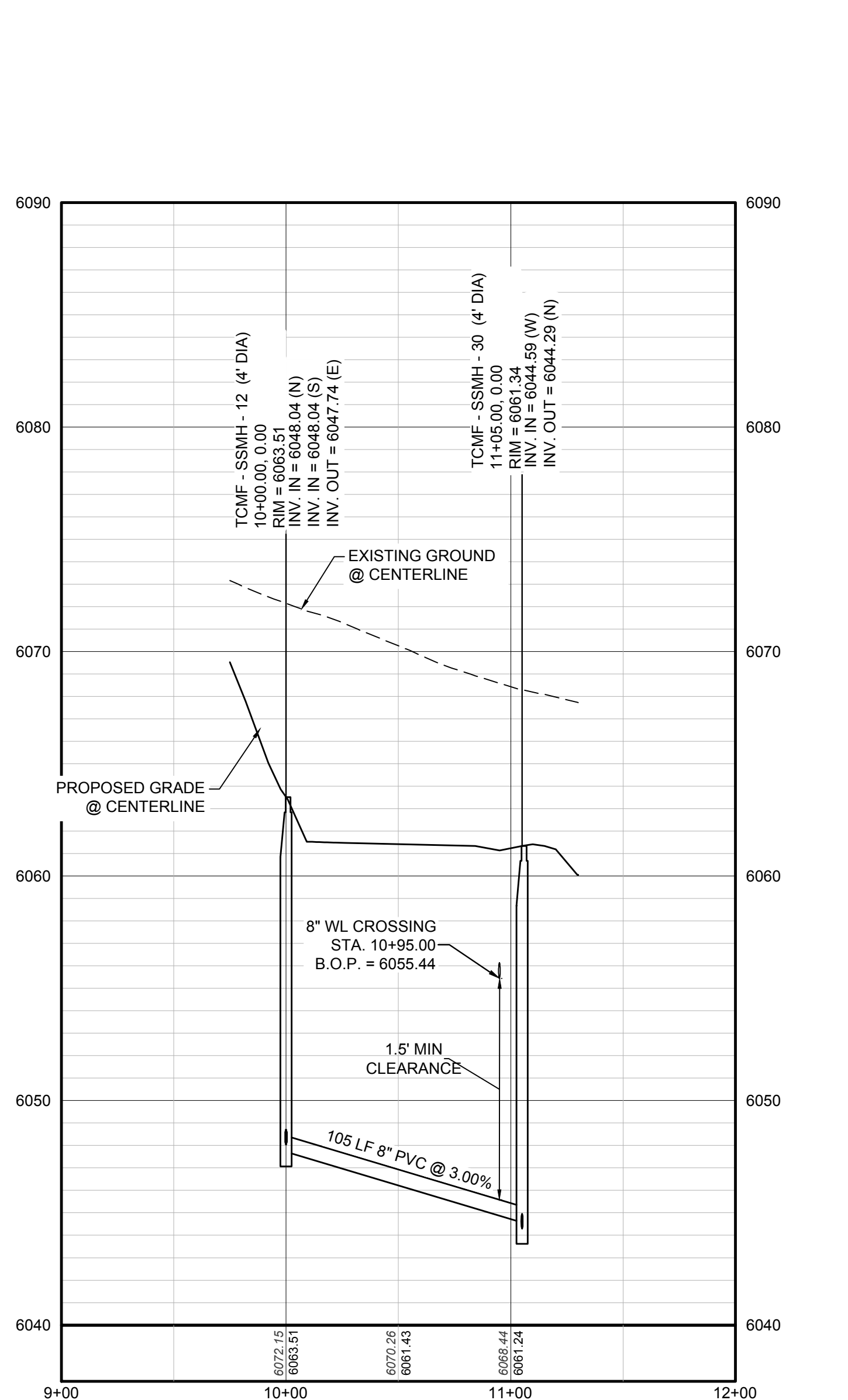
SHEET NUMBER **3**

No.	Revisions	Date	Appr.	Date

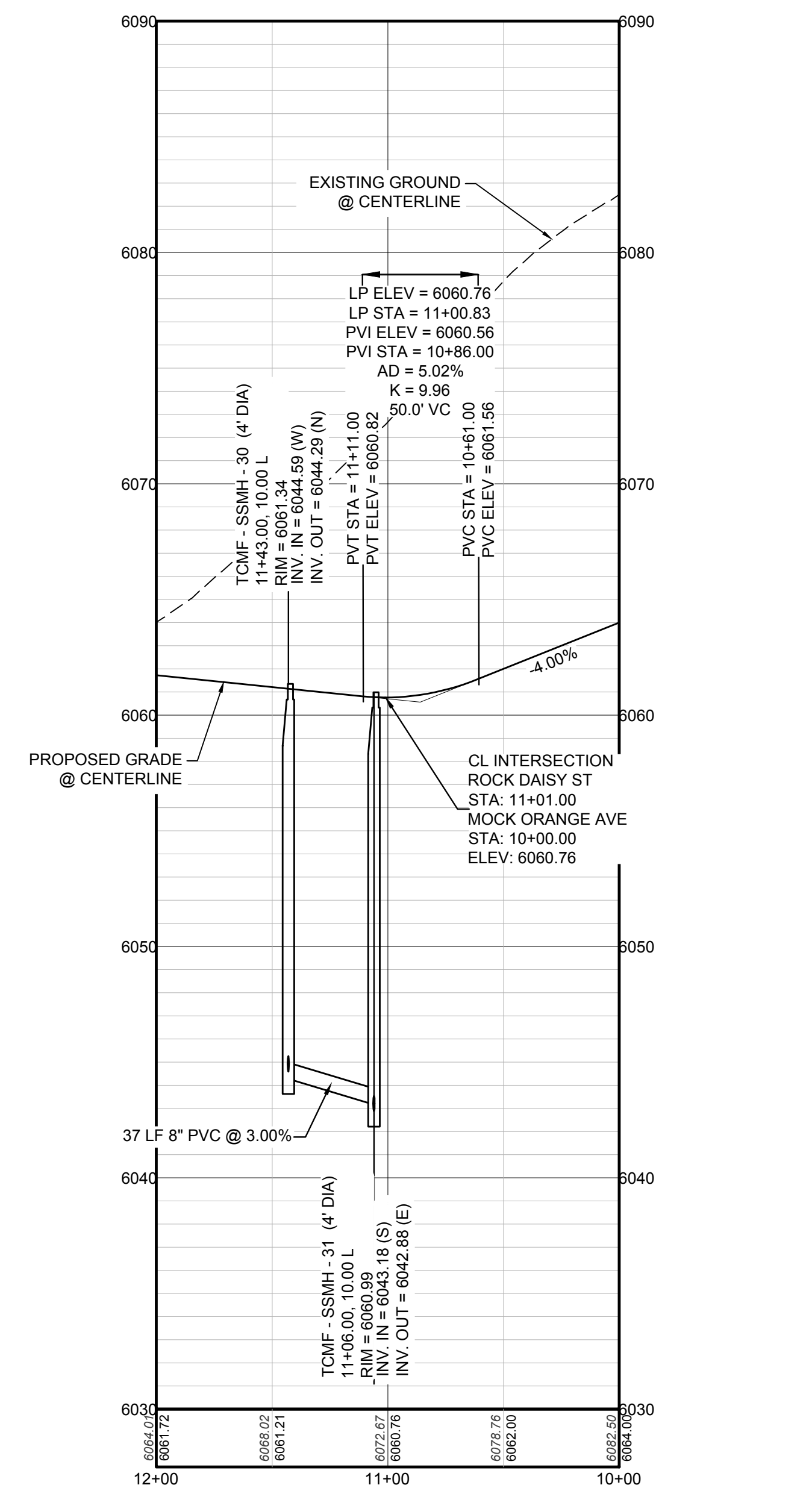


KEYMAP
N.T.S.

PLAN: FILING 15 SS WEST-EAST STA: 9+75.00 TO 11+50.00 & ROCK DAISY ST STA: 11+00.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: FILING 15 SS WEST-EAST STA: 9+00.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: ROCK DAISY ST STA: 12+00.00 TO 10+00.00
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LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
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ABBREVIATIONS

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NOTES:
1. SEE SHEET 3 FOR SANITARY SERVICE TABLES.

N:\PROJECTS\SS RANCH\ENGINEERING\SSHEET SET\MULTIFAMILY\CDSP\FPARKER WATER AND SANITATION\SANITARY SEWER SHEETS\ROCK DAISY POINT.DWG, BRIAN W. 1/12/2018 10:48 AM

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UNCC 1-800-922-1987
UTILITY NOTIFICATION
CENTER OF COLORADO

BENCHMARK
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PREPARED UNDER THE SUPERVISION OF

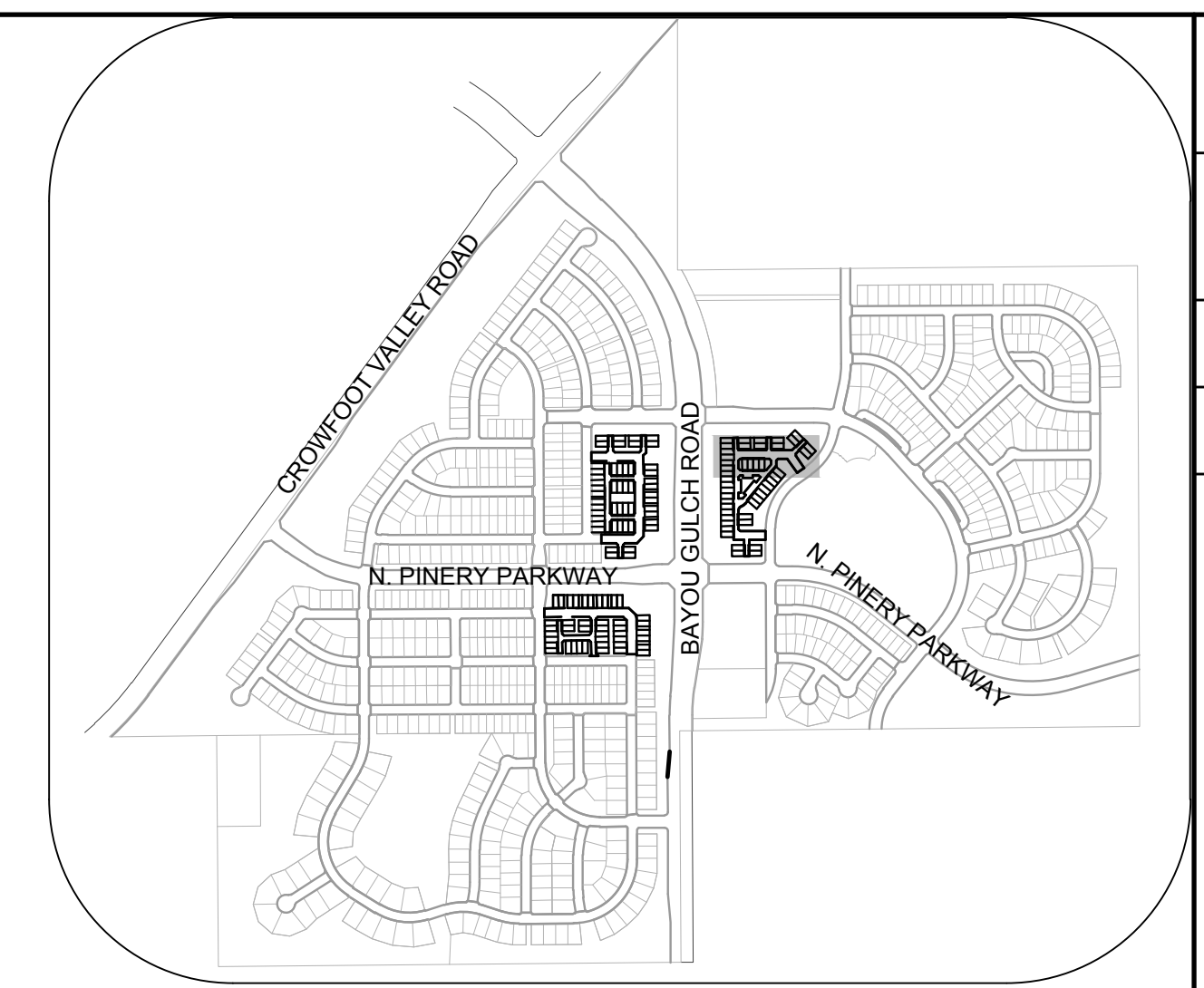
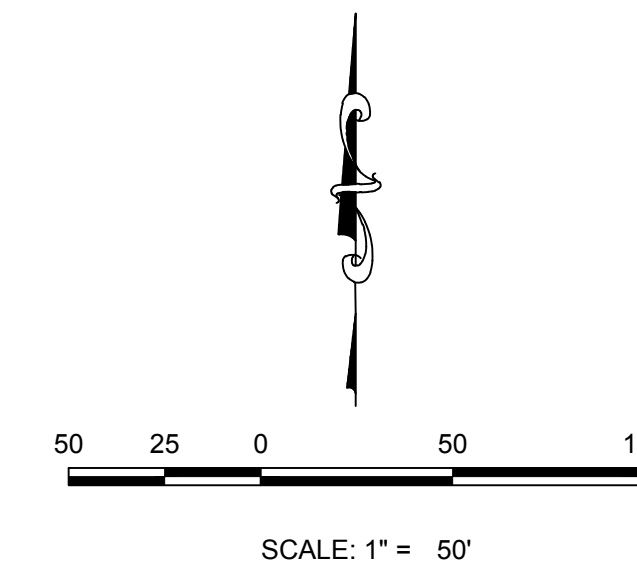
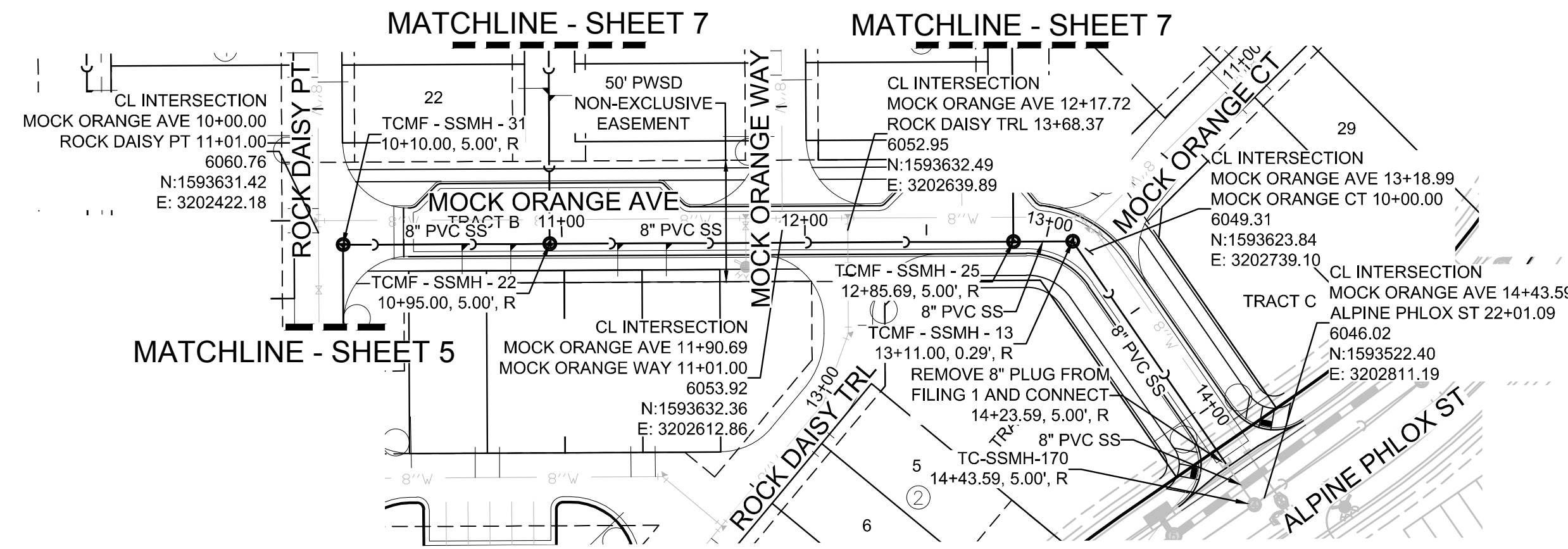
BRIAN P. WILSON
COLORADO P.E. 0050067

SHEET NUMBER	DRAWN BY: RRR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE:	AS SHOWN	FILE NO:	8130283701
				TRAILS AT CROWFOOT	FILING 15 CONSTRUCTION DRAWINGS	SANITARY SEWER PLAN & PROFILE	FILING 15 SS WEST-EAST & ROCK DAISY ST
5	DATE: JUNE 2018	NO.:	REVISIONS:	DATE:	APPR.:	DATE:	DATE:

10339 E. Dry Creek Rd.
Suite 410
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9546

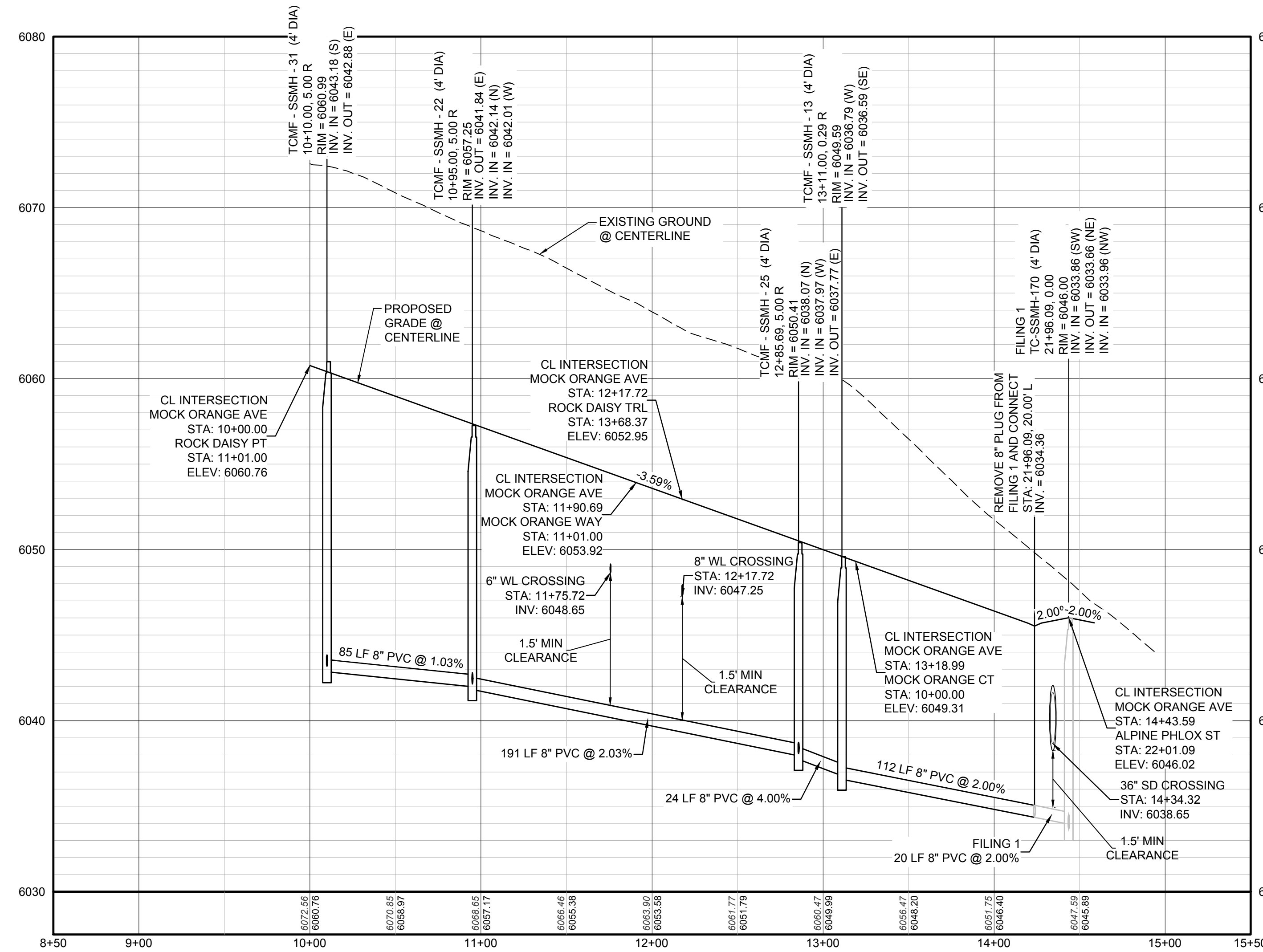
CVL
CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112



KEYMAP
N.T.S.

PLAN: MOCK ORANGE AVE STA: 9+00.00 TO 16+00.00
HORIZONTAL SCALE: 1" = 50'



PROFILE: MOCK ORANGE AVE STA: 8+50.00 TO 15+50.00
HORIZONTAL: 1" = 50'
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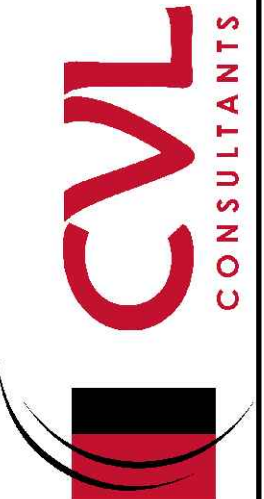
BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

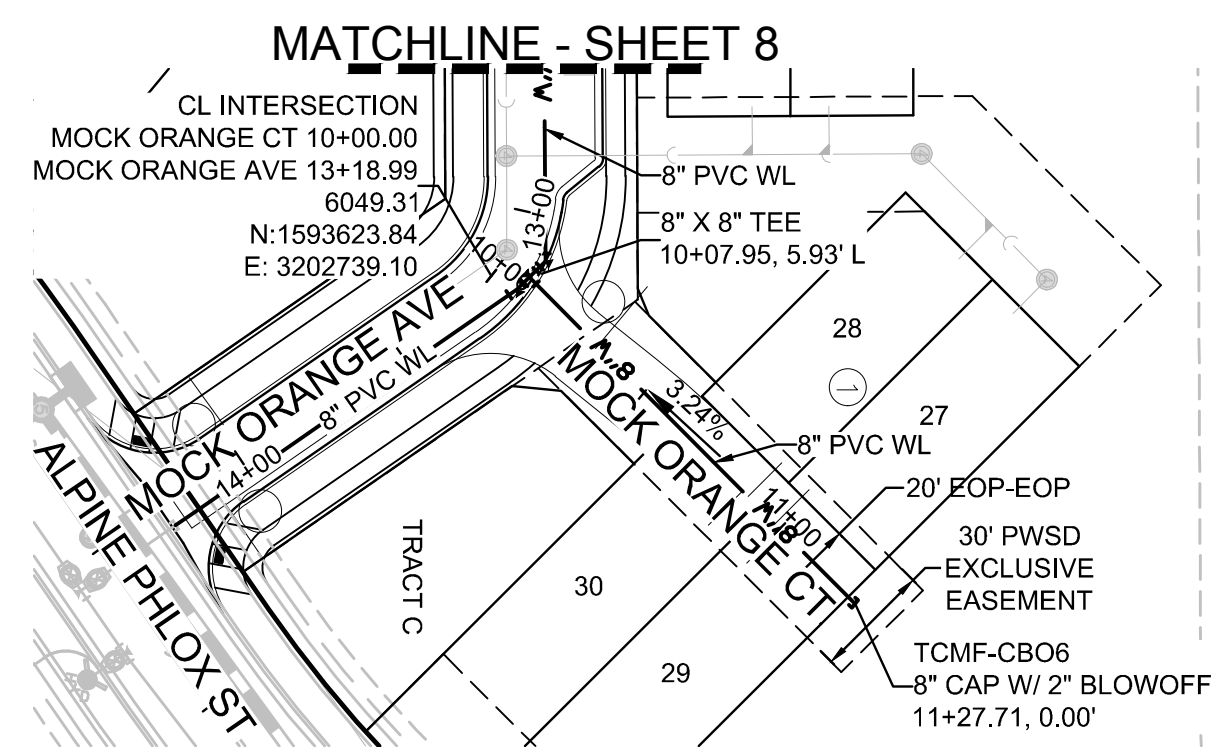
DATE:	JUNE 2018
CHECKED BY:	BPW
DRAWN BY:	RRR
SCALE:	AS SHOWN
FILE NO.:	8130283701
SHEET NUMBER:	6
NO.	
REVISIONS:	
DATE:	
INIT.	
APPR.	
DATE:	

10333 E. Dry Creek Rd.
Suite 410
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9546

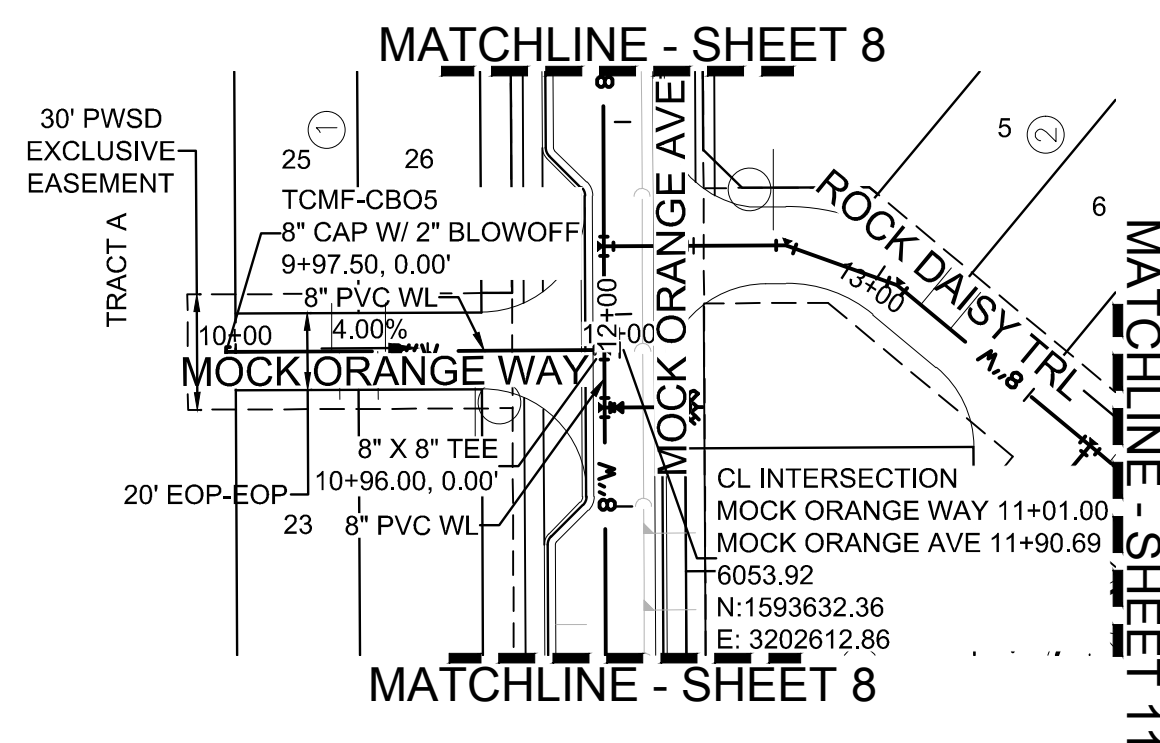


HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

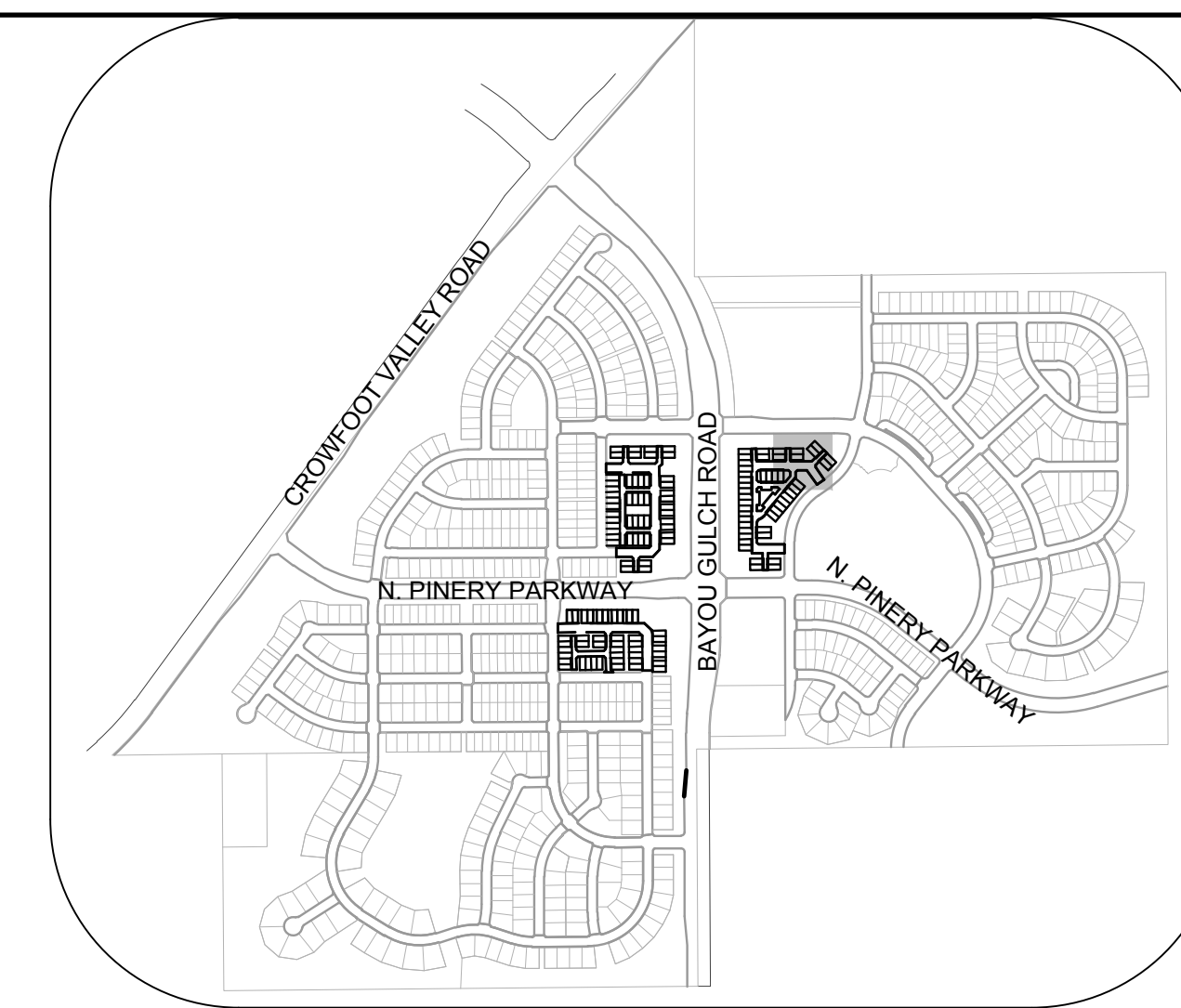
TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
SANITARY SEWER PLAN & PROFILE
MOCK ORANGE AVE



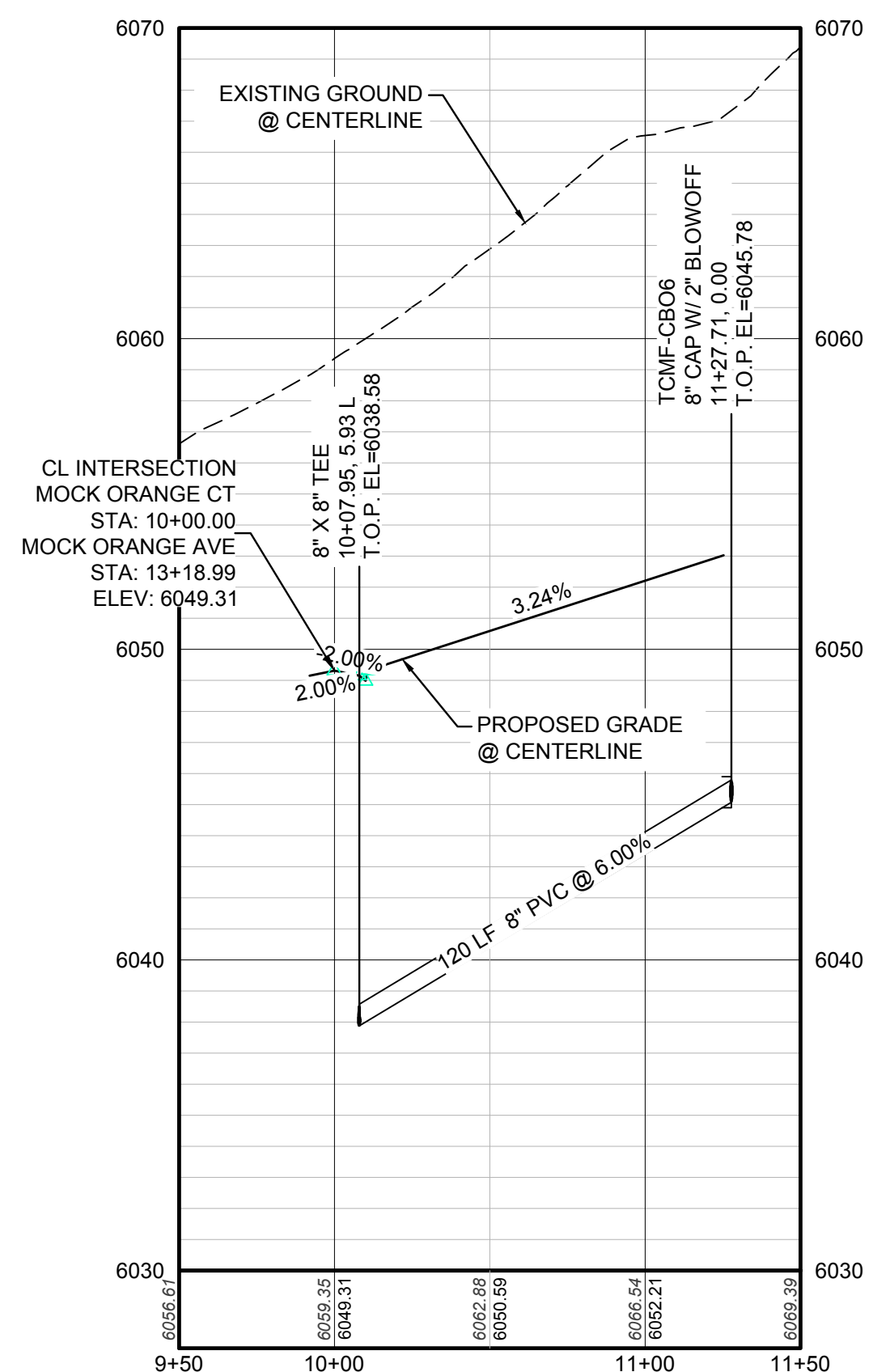
PLAN: MOCK ORANGE CT STA: 10+00.00 TO 11+50.00
HORIZONTAL SCALE: 1" = 50'



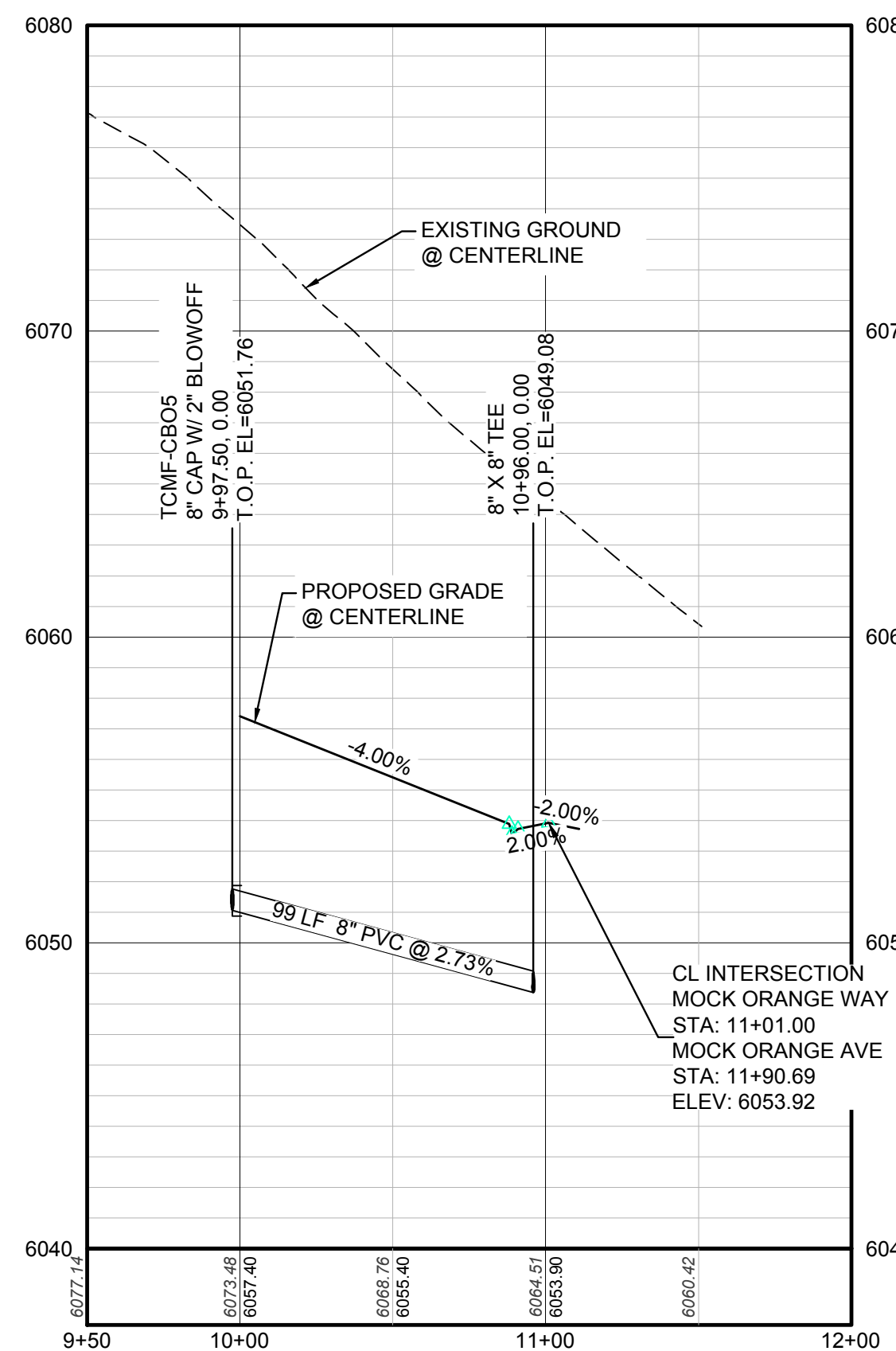
PLAN: MOCK ORANGE WAY STA: 9+50.00 TO 12+00.00
HORIZONTAL SCALE: 1" = 50'



KEYMAP
N.T.S.



PROFILE: MOCK ORANGE CT STA: 9+50.00 TO 11+50.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: MOCK ORANGE WAY STA: 9+50.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'

LEGEND

②	BLOCK NUMBER	△	PROPOSED RANGE POINT
Ⓐ	LOT TYPE	---	CENTERLINE
6	LOT NUMBER	---	RIGHT-OF-WAY
⊗	PROPOSED BUTTERFLY VALVE	---	PROPERTY LINE
⌈	PROPOSED CAP WITH END OF LINE BLOWOFF	---	EDGE OF PAVEMENT
⊞	PROPOSED REDUCER	→	PROPOSED DIRECTION OF FLOW
⊗	PROPOSED VALVE	1.0%	PROPOSED SLOPE & DIRECTION
⊗	PROPOSED FIRE HYDRANT	---	EXISTING 5' CONTOUR
⊞	PROPOSED WL FITTING WITH THRUST BLOCK	---	EXISTING 1' CONTOUR
⊞	PROPOSED FLARED END SECTION	---	PROPOSED 5' CONTOUR
⊞	PROPOSED LOW POINT BLOW-OFF	---	PROPOSED 1' CONTOUR
⊞	PROPOSED AIR VALVE	---	PROPOSED STORM DRAIN
⊞	FUTURE PHASE VALVE	---	PROPOSED SEWER LINE WITH MANHOLE
⊞	FUTURE FIRE HYDRANT	---	PROPOSED SEWER LATERAL
⊞	PROPOSED LIGHT POLE	---	PROPOSED WATER LINE
⊞	PROPOSED SIDEWALK	---	PROPOSED WATER LATERAL W/ METER
⊞	PROPOSED SIDEWALK RAMP	---	SECTION LINE
10.00	EXISTING ELEVATION	---	FILING BOUNDARY
10.00	PROPOSED DESIGN ELEVATION	---	EXISTING FIBER OPTIC LINE
⊞	PROPOSED STORM DRAIN INLET	---	EXISTING OVERHEAD POWER
⊞	PROPOSED STORM DRAIN MANHOLE	---	EXISTING TELEPHONE LINE

ABBREVIATIONS

AD	ANGLE DIFFERENCE	MH	MANHOLE
AV	AIR VAC RELEASE VALVE	N.T.S.	NOT TO SCALE
BVC	BEGIN VERTICAL CURVE	PVC	POLYVINYL CHLORIDE
BVP	BEGIN VERTICAL PROFILE	PVI	PT. OF VERTICAL INTERSECTION
CBO	CAP WITH BLOW OFF	PVT	POINT OF VERTICAL TANGENT
CRR	CURB RETURN RADIUS	ROBC	REINFORCED CONCRETE BOX CULVERT
EL	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	ROW	RIGHT OF WAY
EVC	END VERTICAL CURVE	SC	SANITARY CAP
EVP	END VERTICAL PROFILE	SD	STORM DRAIN
FG	FINISHED GROUND	SL	SECTION LINE
FH	FIRE HYDRANT	SS	SANITARY SEWER
FL	FLOW LINE	STA	STATION
GV	GATE VALVE	T.O.P.	TOP OF PIPE
HCR	HANDICAP CURB RAMP	UE	UTILITY EASEMENT
HP	HIGH POINT	VC	VERTICAL CURVE
INV	INVERT	WL	WATER LINE
K	CURVATURE COEFFICIENT	WLC	WATER LINE CONNECTION
LF	LINEAR FEET	WSE	WATER SURFACE ELEVATION

NOTES:
1. SEE SHEET 3 FOR WATER SERVICE TABLES.

N:\PROJECTS\SSR\BENCHMCK\ENGINEERING\SSR\SSR\MULTIFAMILY\COSIF\SPARKER WATER AND SANITATION\WATER PAPER\MOCK ORANGE WAY DWG. BRIAN.W. 1/2/2018 10:58 AM

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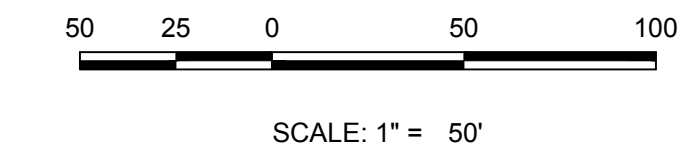
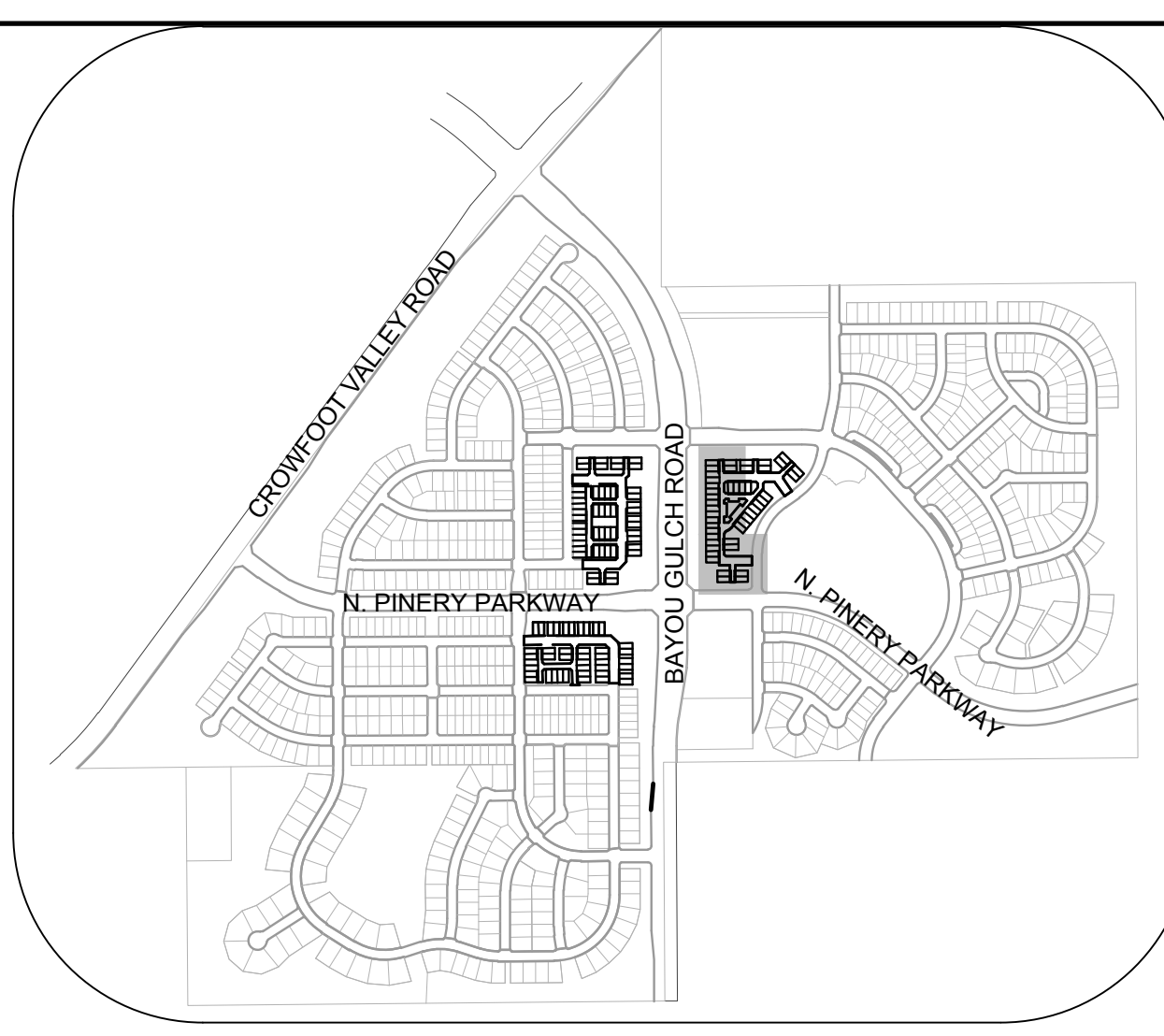
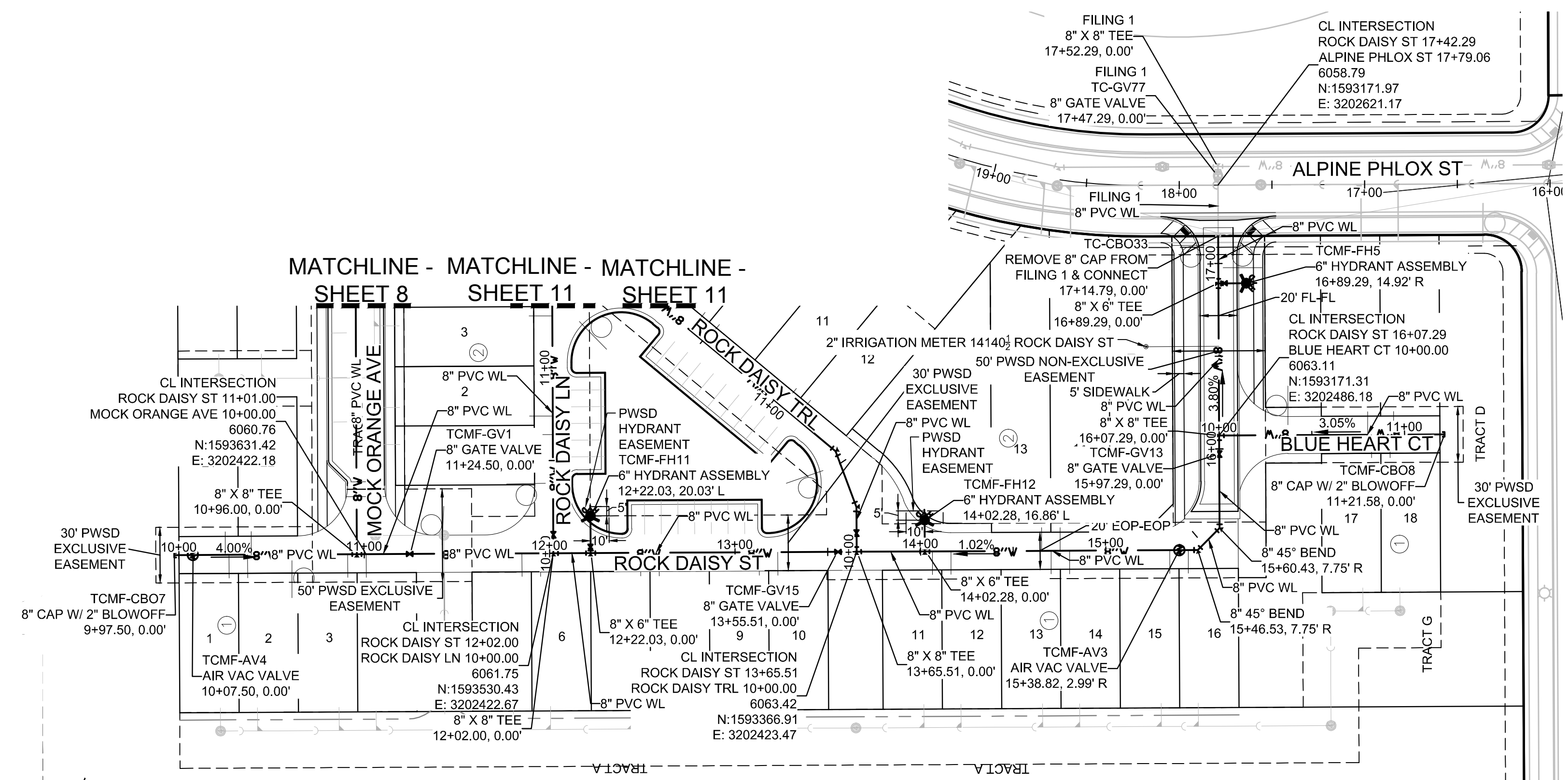
BENCHMARK
THE DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '83 DATUM.

BASIS OF BEARINGS:
THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 23053 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6935 BEING CONSIDERED TO BEAR SOUTH 00°15'06" EAST, 2648.70 FEET.

PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

DATE:	JUNE 2018
CHECKED BY:	BPW
DRAWN BY:	RRR
SCALE:	AS SHOWN
FILE NO.:	8130283701
SHEET NUMBER:	9
PROJECT:	TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE MOCK ORANGE WAY & MOCK ORANGE COURT
CONSULTANTS:	CVL CONSULTANTS 10338 E. Dry Creek Rd. Suite 410 Englewood, CO 80150 Tel: (720) 482-9526 Fax: (720) 482-9548
NO.:	
REVISIONS:	
DATE:	
INITIALS:	
APPROVED:	
DATE:	

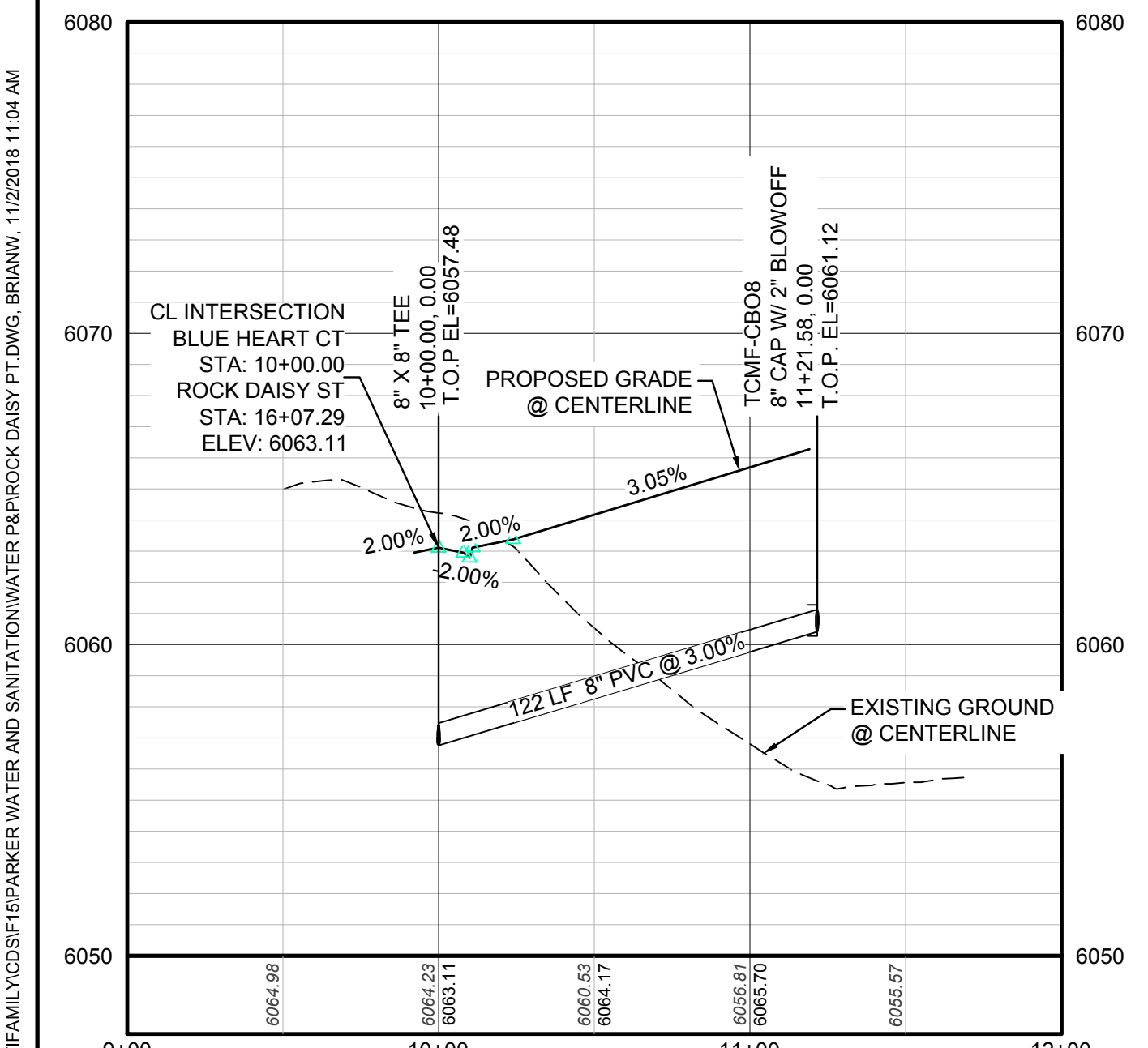


LEGEND

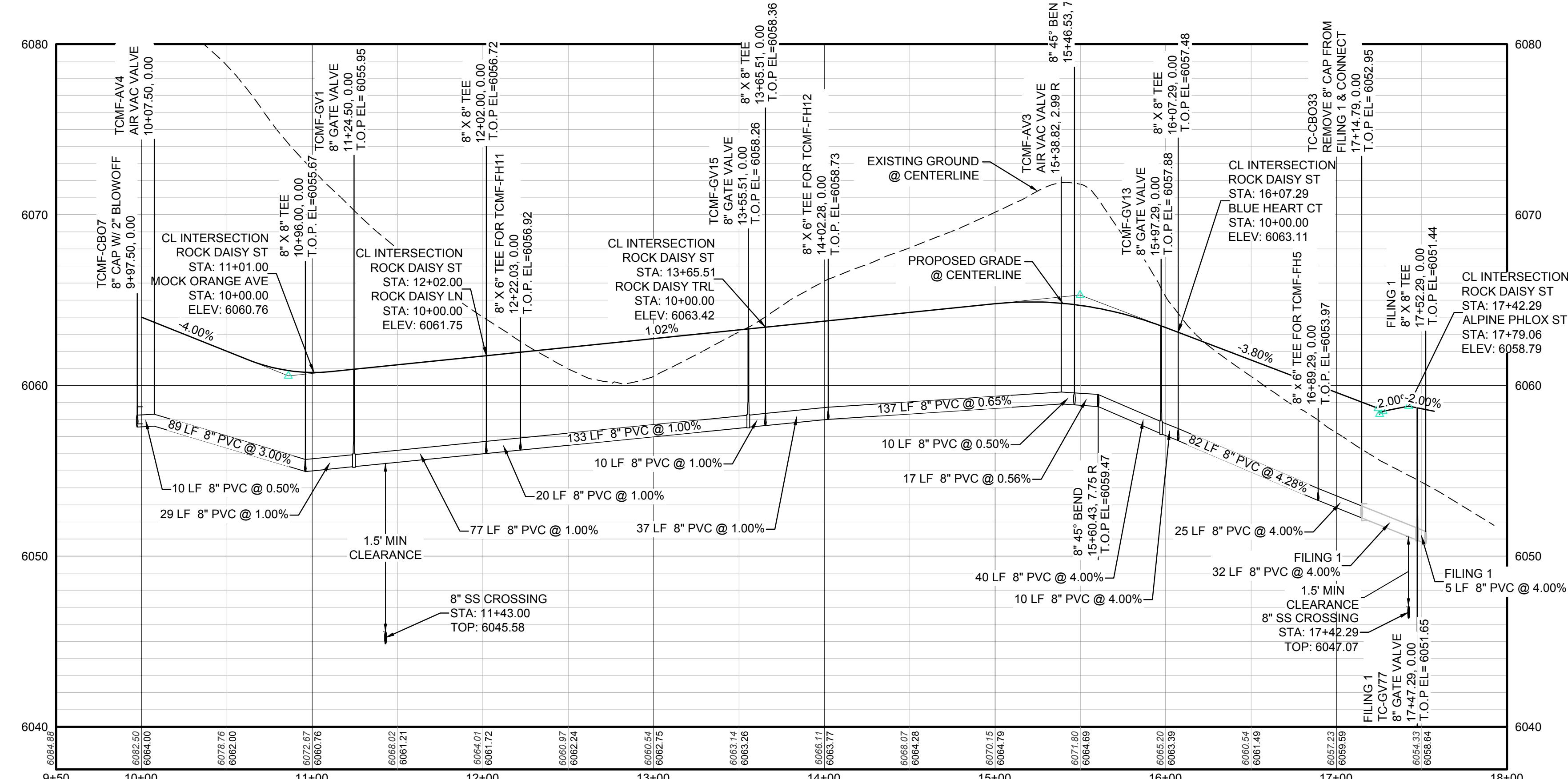
	BLOCK NUMBER		PROPOSED RANGE POINT
	LOT TYPE		CENTERLINE
	LOT NUMBER		RIGHT-OF-WAY
	PROPOSED BUTTERFLY VALVE		PROPERTY LINE
	PROPOSED CAP WITH END OF LINE BLOWOFF		EDGE OF PAVEMENT
	PROPOSED REDUCER		PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE		PROPOSED SLOPE & DIRECTION
	PROPOSED FIRE HYDRANT		EXISTING 5' CONTOUR
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	EXISTING ELEVATION		FILING BOUNDARY
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	PROPOSED STORM DRAIN INLET		EXISTING OVERHEAD POWER
	PROPOSED STORM DRAIN MANHOLE		EXISTING TELEPHONE LINE

N:\PROJECTS\SSR\BENCHMARK\ENGINEERING\SSR\BENCHMARK\WATER AND SANITATION\WATER PIPING\ROCK DAISY PT.DWG. BRANK. 11/20/18 11:04 AM

PROFILE: BLUE HEART CT STA: 9+00.00 TO 12+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PROFILE: ROCK DAISY ST STA: 9+50.00 TO 18+00.00
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



ABBREVIATIONS

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NOTES:
1. SEE SHEET 3 FOR WATER SERVICE TABLES.

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BENCHMARK
A DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.060032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1799.2870 METERS (5903.13 FEET) NAVD '88 DATUM.

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PREPARED UNDER THE SUPERVISION OF

BRIAN P. WILSON
COLORADO P.E. 0050067

SHEET NUMBER	10				
	TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER PLAN & PROFILE ROCK DAISY STREET & BLUE HEART COURT				
DRAWN BY:	RRR				
CHECKED BY:	BPW				
DATE:	JUNE 2018				
SCALE:	AS SHOWN				
FILE NO.:	8130283701				
Revisions	No.	Date	Init.	Appr.	Date

10333 E. Dry Creek Rd.
Suite 6410
Englewood, CO 80150
Tel: (720) 482-9526
Fax: (720) 482-9548

CVL
CONSULTANTS

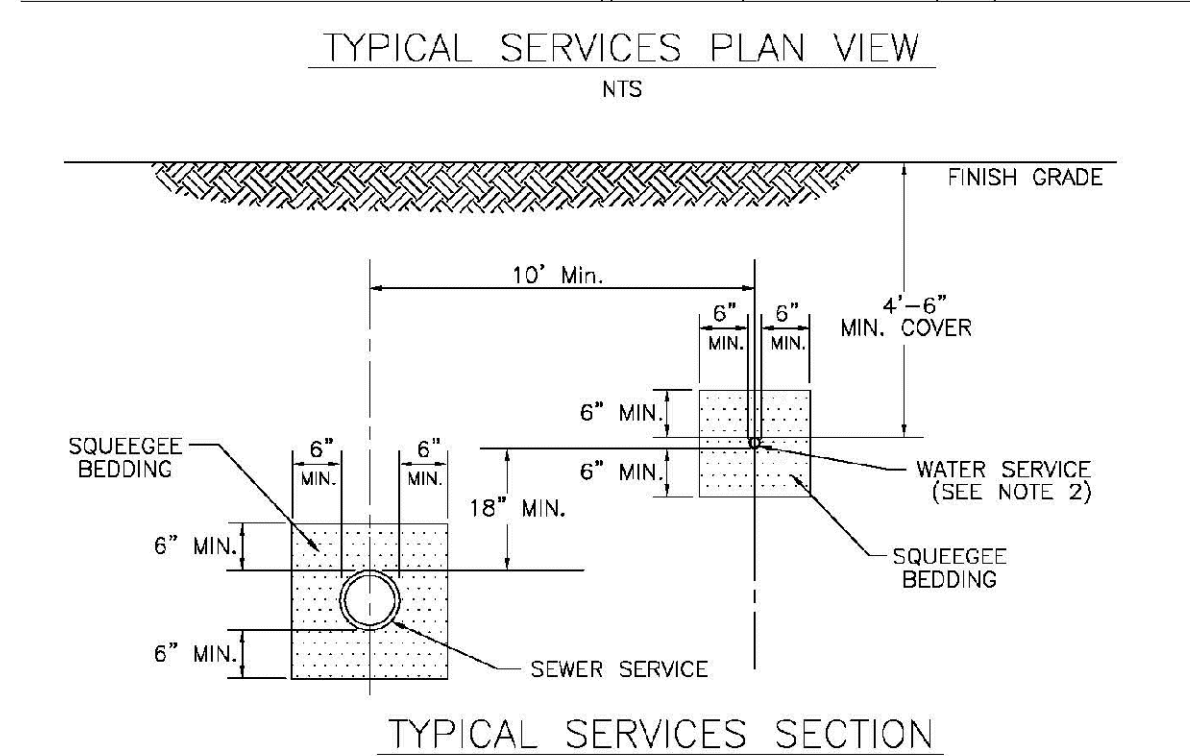
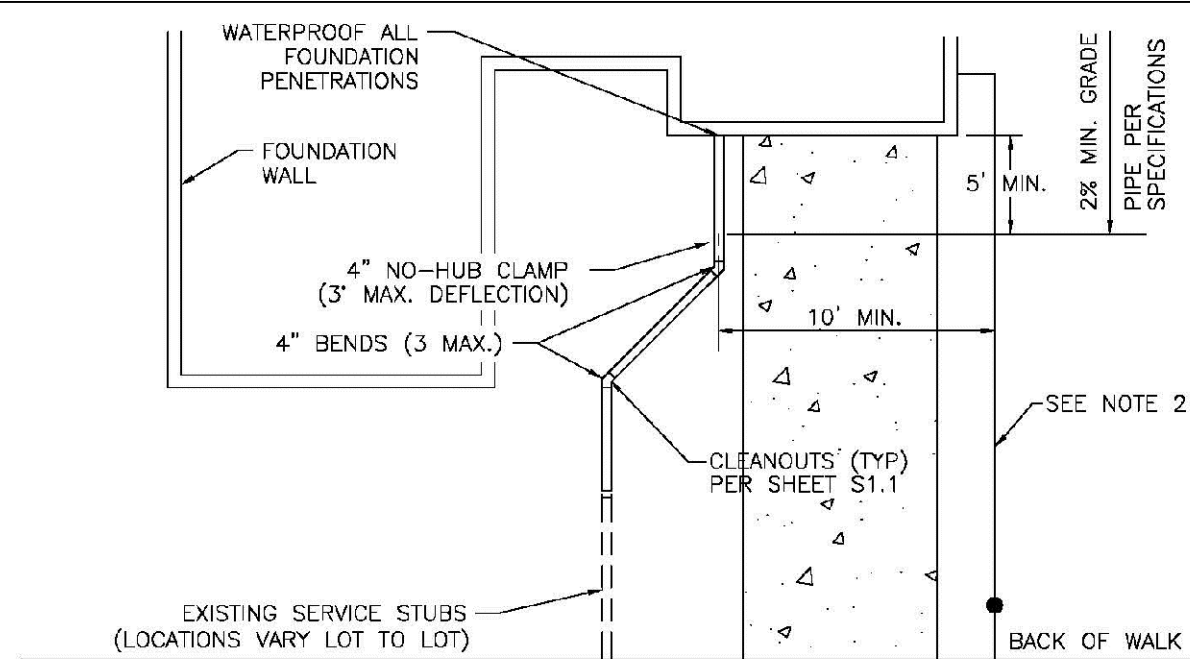
HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

- INSPECTION POLICY:**
1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED WITH THE DISTRICT OFFICE AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
 2. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTE 1 ABOVE AND A RE-INSPECTION FEE CHARGED.
 3. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
 4. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
 5. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
 6. LOTS WITHOUT BUILDING ADDRESSES OR LOT AND BLOCK NUMBERS BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
 7. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION UNLESS COORDINATED WITH DISTRICT INSPECTOR.

- INSTALLATION NOTES:**
- SEWER**
1. ACCEPTABLE PIPE MATERIALS ARE TO BE SDR 35 PVC PIPE, ABS PIPE AND PVC SCHD 40 PIPE. APPROVED BEDDING IS TO BE SQUEEGEE.
 2. NO-HUB CLAMPS SHALL BE USED TO JOIN 2 MALE PIPE ENDS WITH A MAXIMUM DEFLECTION OF 3'.
 3. MINIMUM GRADE SHALL BE 2%.
 4. INSTALLATION SHALL INCLUDE NO MORE THAN 3 BENDS. 90° BENDS ARE NOT ALLOWED. SOLVENT WELDED PIPE WILL NOT BE ALLOWED.
 5. CLEAN-OUTS SHALL BE INSTALLED AT 100' INTERVALS AND EVERY CHANGE IN DIRECTION. CLEAN-OUTS ARE NOT REQUIRED FOR SERVICES LESS THAN 100' UNLESS THERE ARE CHANGES IN DIRECTION. PROVIDE DUAL CLEAN-OUT WITHIN 5 FEET OF FOUNDATION.
 6. STRESSING OF THE PIPE BETWEEN FITTINGS WILL NOT BE ALLOWED.
 7. SEWER SERVICE LINE SHALL NOT BE LOCATED UNDER CONCRETE SURFACE.
 8. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"Y" FOR WATER SERVICES

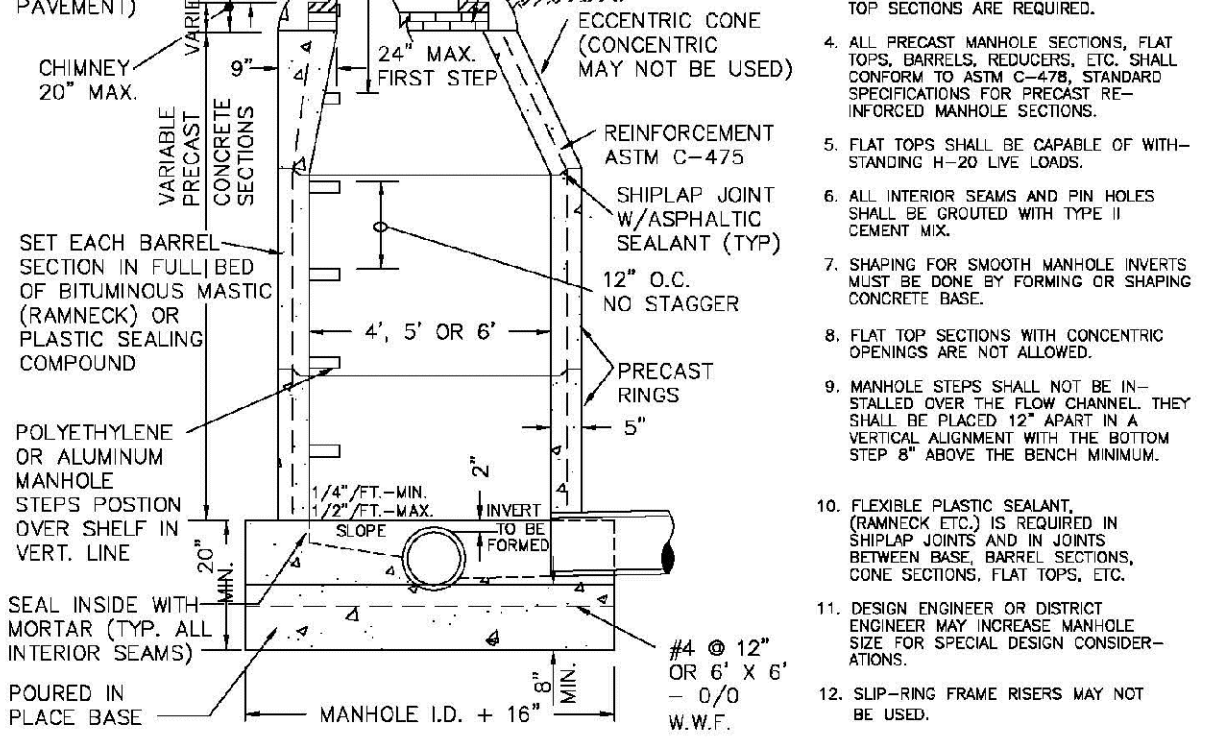
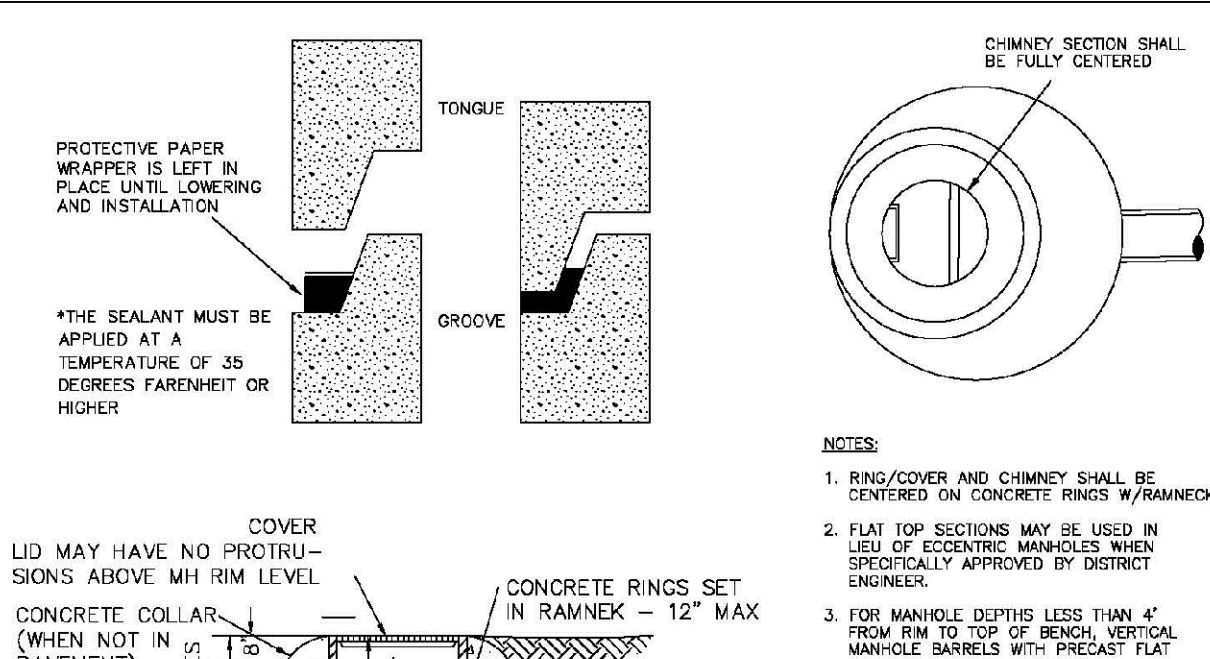
PARKER WATER & SANITATION DISTRICT
DISTRICT POLICIES & INSTALLATION NOTES FOR SEWER SERVICES

SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 12/16
	1/08 10/16
DIRECTOR OF ENGINEERING	1/16



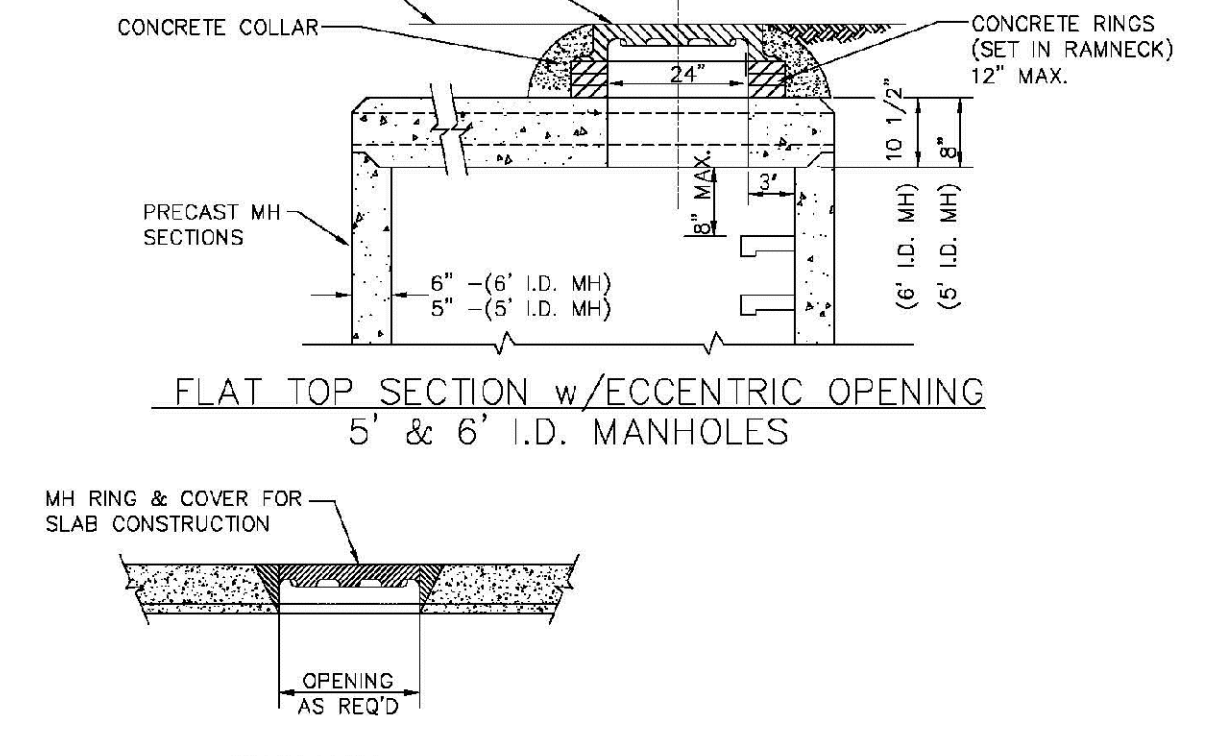
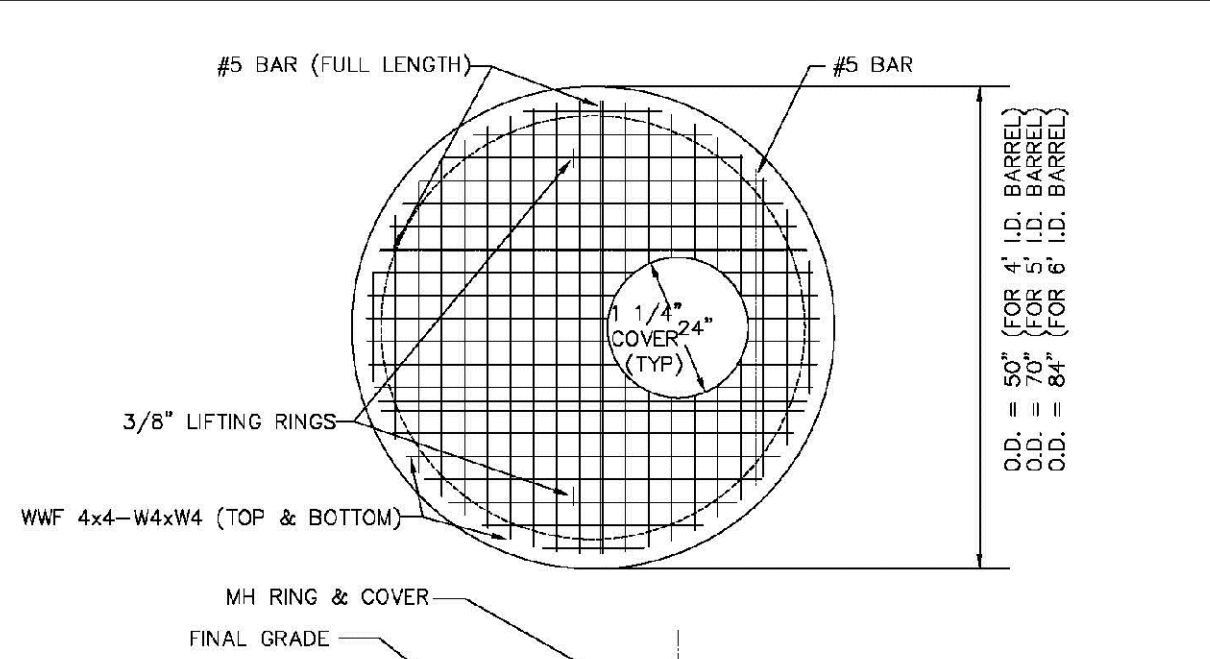
PARKER WATER & SANITATION DISTRICT
TYPICAL SEWER SERVICES

SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/90 01/02 01/16 10/16
DIRECTOR OF ENGINEERING	



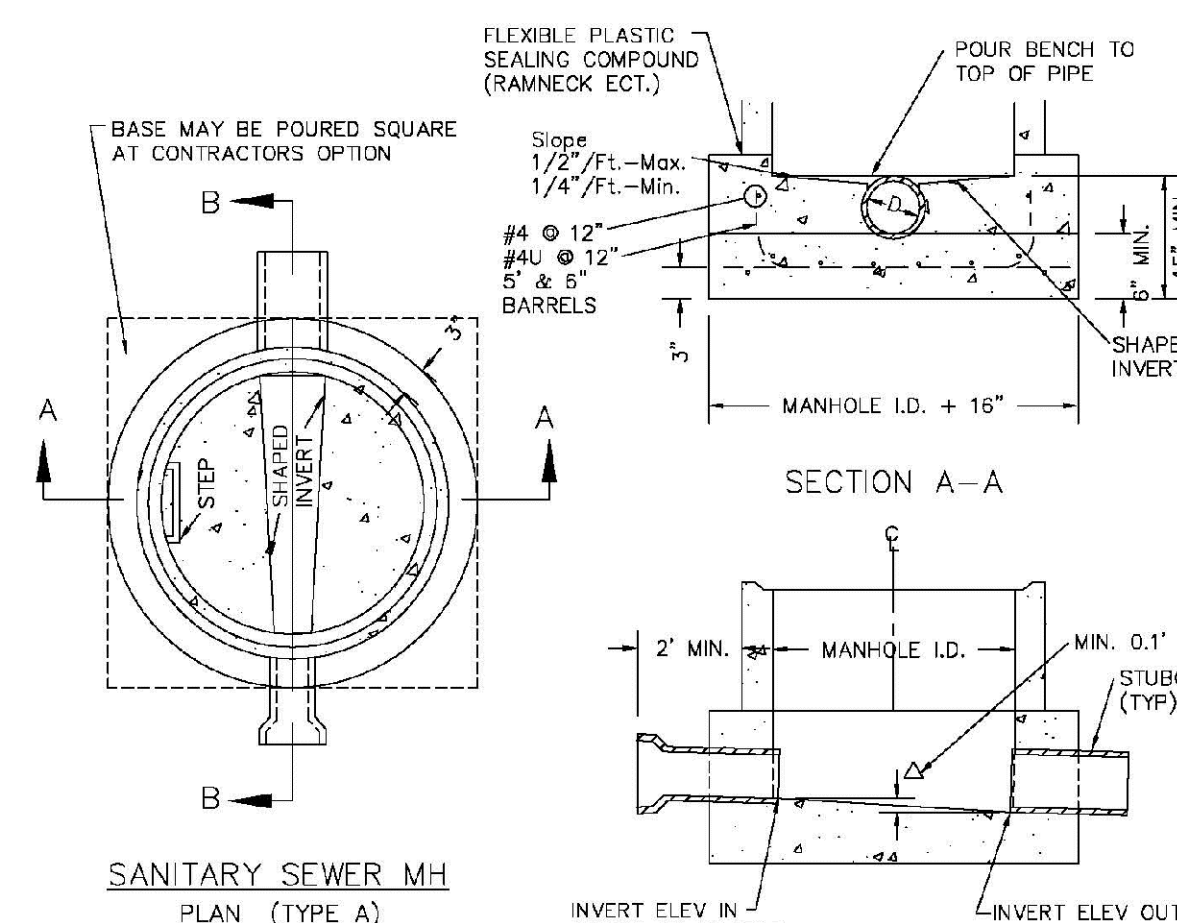
PARKER WATER & SANITATION DISTRICT
PARKER MANHOLE ECCENTRIC CONE

SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 10/16 01/02 1/08 1/16
DIRECTOR OF ENGINEERING	



PARKER WATER & SANITATION DISTRICT
PRECAST MANHOLE - 5' & 6' I.D. WITH ECCENTRIC CONE

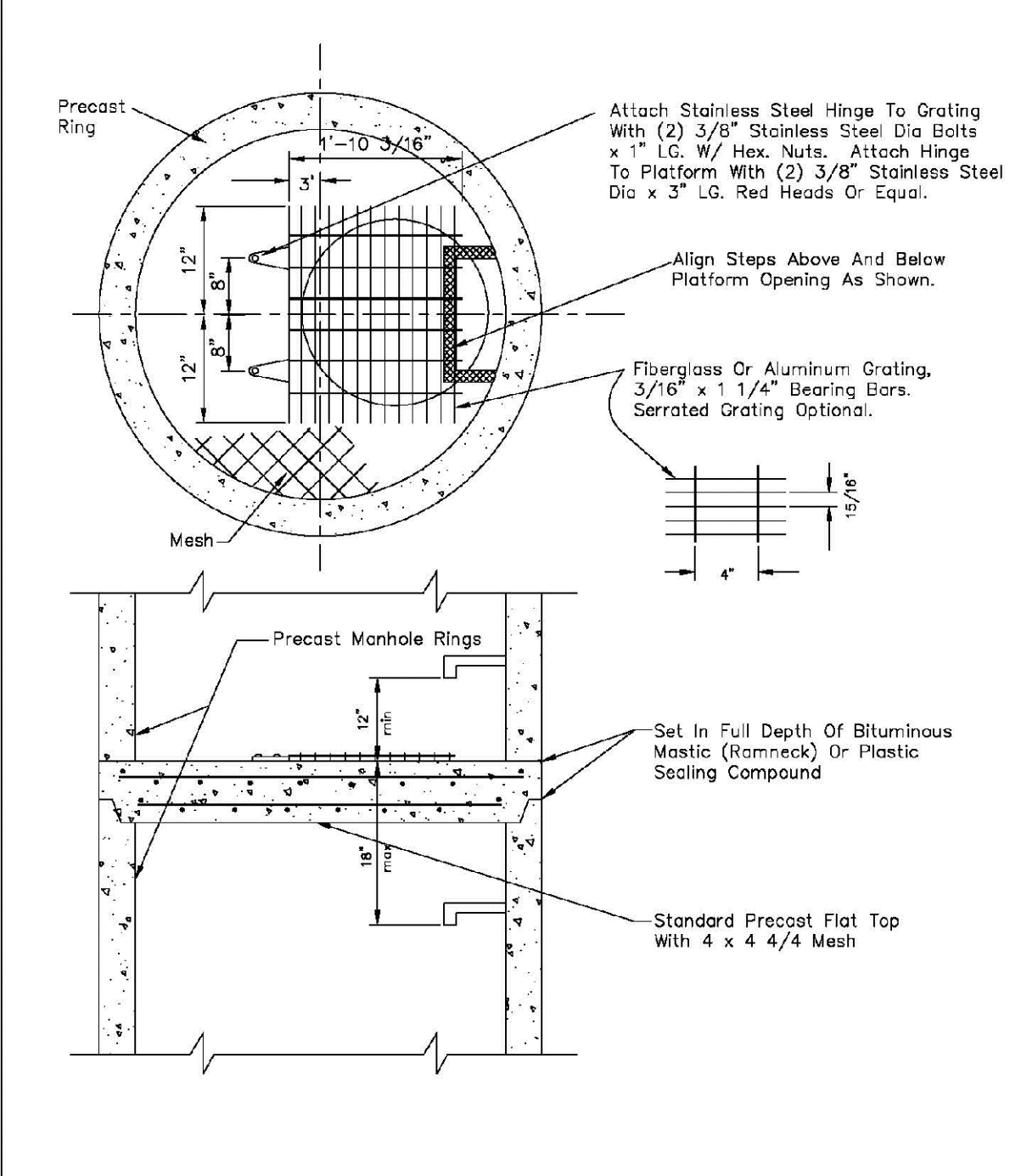
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 01/16 10/16
DIRECTOR OF ENGINEERING	



- NOTES:**
1. Manhole barrel min. thickness to be 5".
 2. Shaping for smooth manhole inverts may be done by forming or shaping with cement mortar (San. Sewer).
 3. The manhole steps shall conform to District Standards and Specifications.
 4. Precast sections to conform to A.S.T.M C-478.
 5. All dead-end manholes, that call out a stub out, shall be thru at 0.40% minimum slope.
 6. Stub outs shall extend 2'-3" minimum past manhole O.D. and be satisfactorily plugged.
 7. Reinforcing in base required for manhole.
 8. Slope of bench = 1/2" / FT. - Max. 1/4" / FT. - Min.
 9. Δ = Invert drop thru MH (if Δ > 18", outside drop MH required). Min. D.1" for all straight through MH and 0.2" for all angled MH.

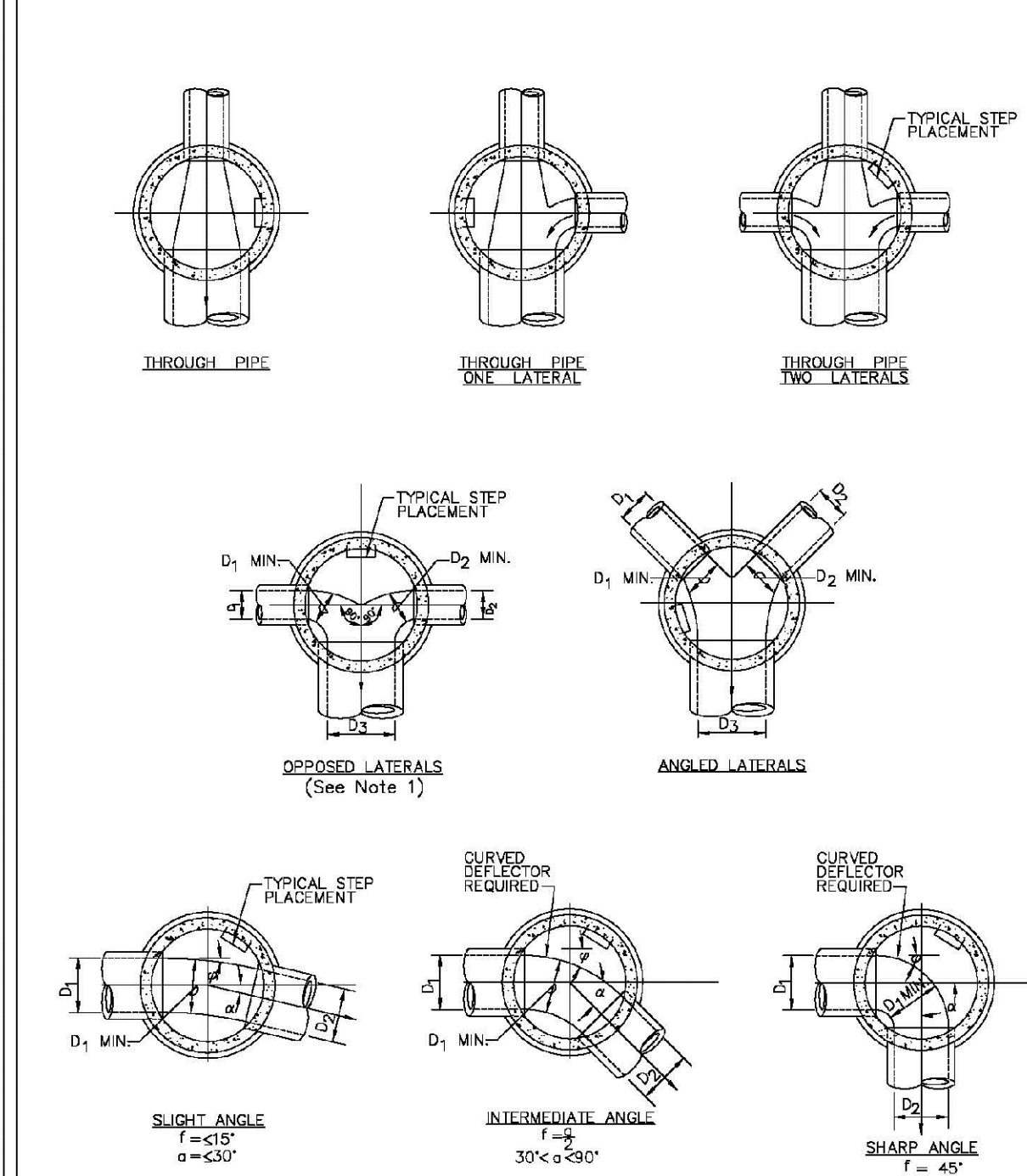
PARKER WATER & SANITATION DISTRICT
CAST-IN-PLACE MANHOLE BASE DETAIL

SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/02 01/16 10/16
DIRECTOR OF ENGINEERING	



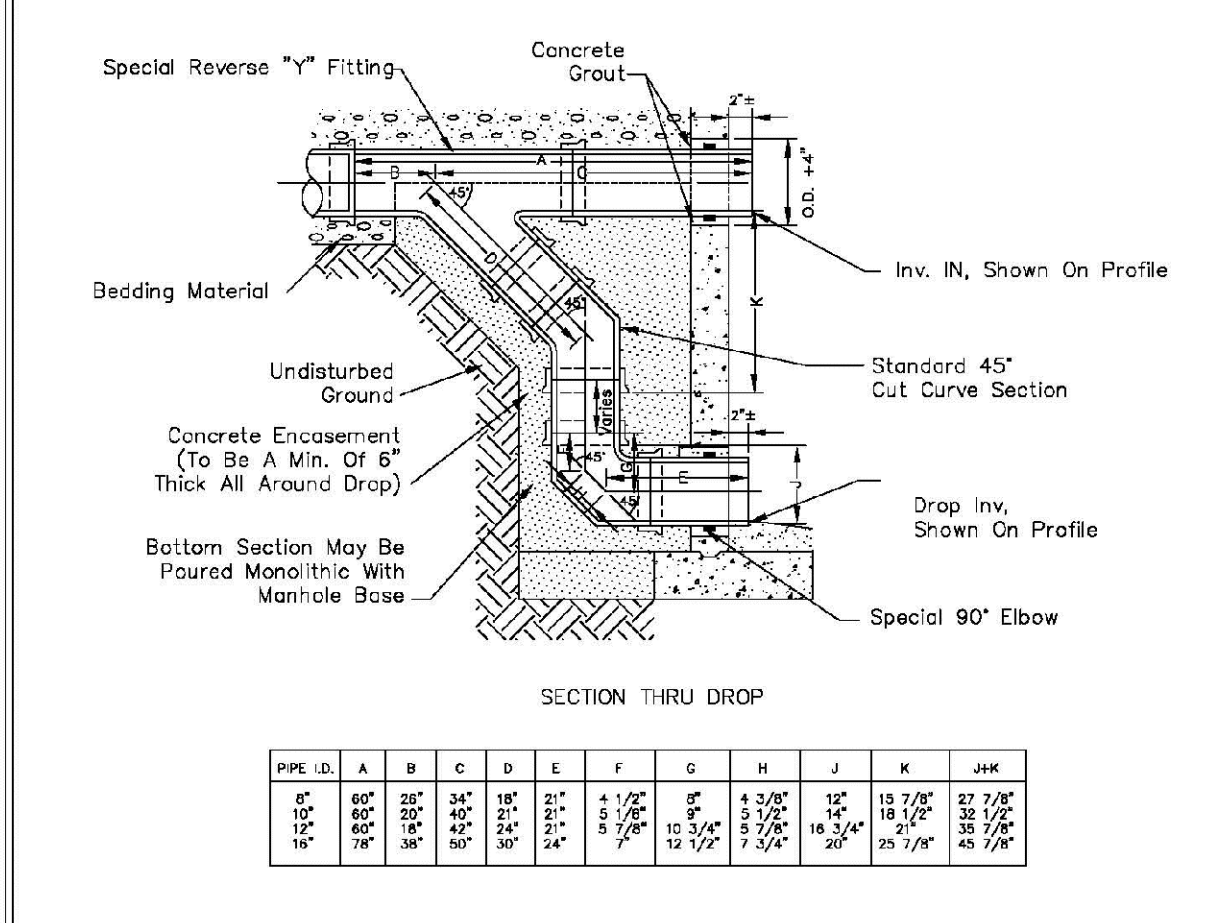
PARKER WATER & SANITATION DISTRICT
INTERMEDIATE PLATFORM FOR MANHOLES OVER 20' DEPTH

SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/90 1/16 10/16
DIRECTOR OF ENGINEERING	



PARKER WATER & SANITATION DISTRICT
TYPICAL BASE CHANNELIZATION DETAILS

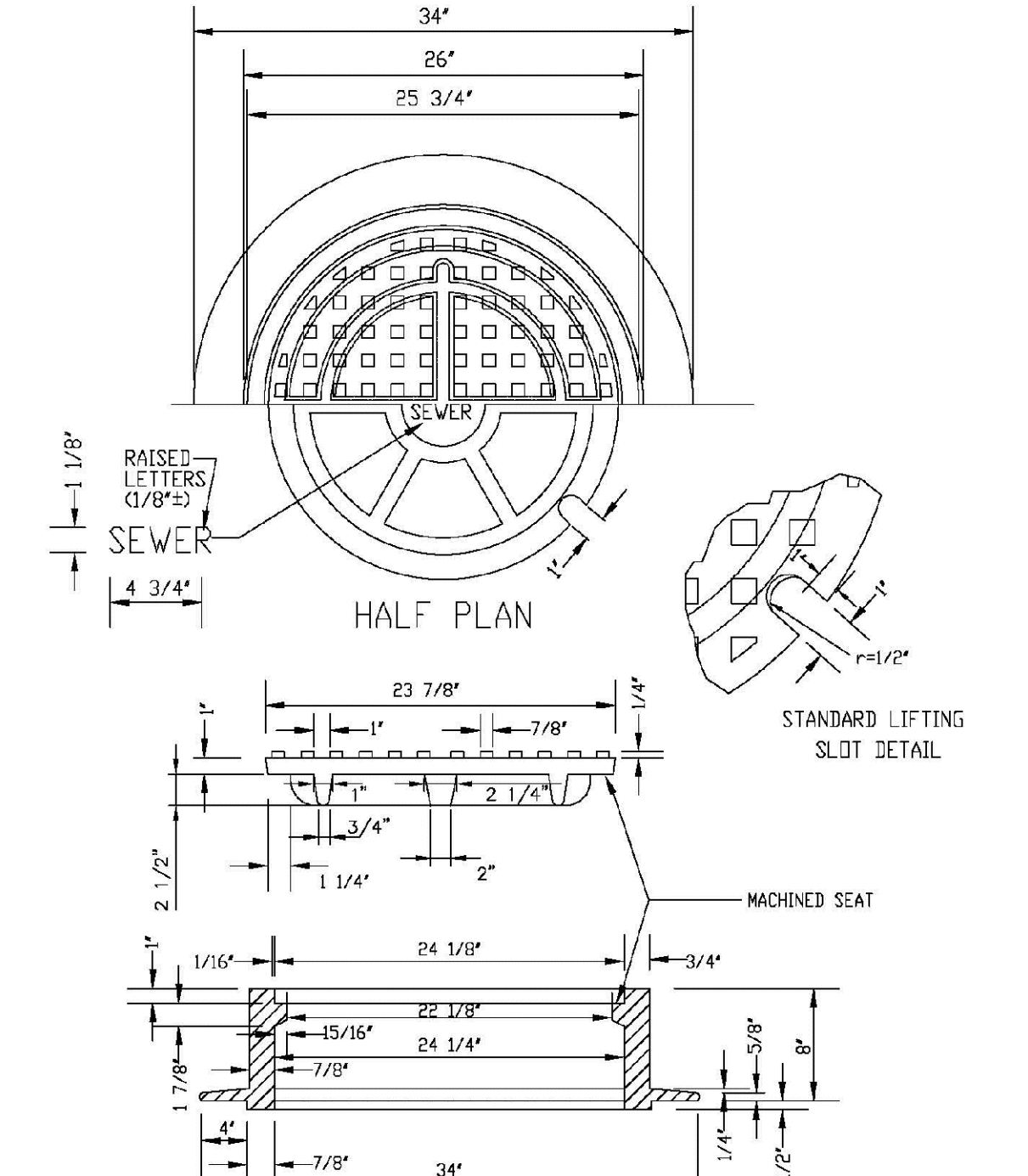
SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
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PIPE I.D.	A	B	C	D	E	F	G	H	J	K	MIN.
18" & SMALLER	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"
21" TO 48"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"	5'-0"
54"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"
60" & LARGER	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN	SPECIAL DESIGN

PARKER WATER & SANITATION DISTRICT
OUTSIDE DROP MANHOLE CONSTRUCTION

SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
DIRECTOR OF ENGINEERING	



PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER

SCALE: NONE	DATE: 2/96
APPROVED: PVR	01/16 10/16
DIRECTOR OF ENGINEERING	

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HR 935 LLC
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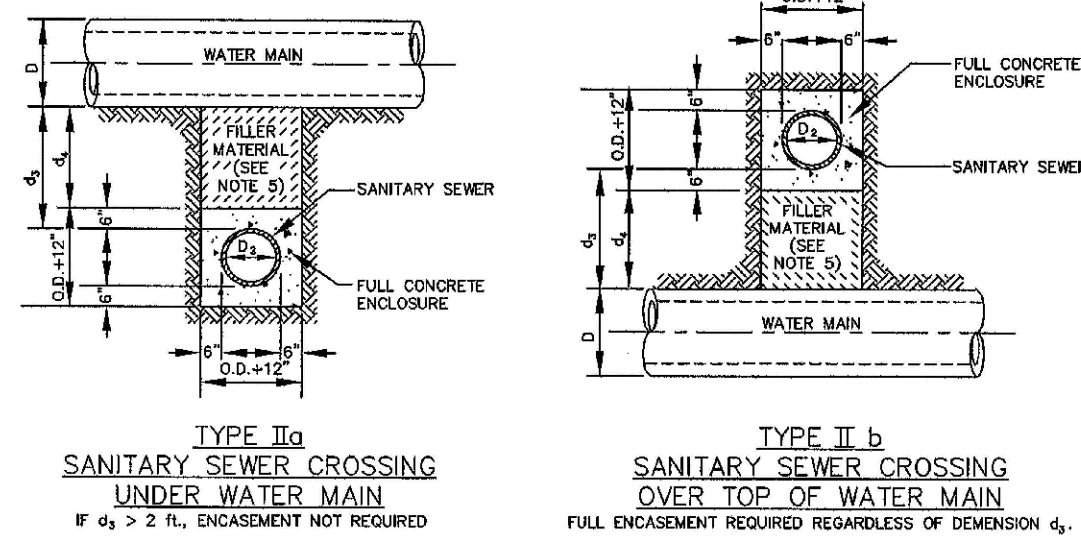
TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: RHR
CHECKED BY: BPW
DATE: JUNE 2018

12

No.	Revisions	Date	Appr.	Date



TYPE IIa
SANITARY SEWER CROSSING UNDER WATER MAIN
IF $d_1 > 2$ FT., ENCASMENT NOT REQUIRED

TYPE IIb
SANITARY SEWER CROSSING OVER TOP OF WATER MAIN
FULL ENCASMENT REQUIRED REGARDLESS OF DIMENSION d_1 .

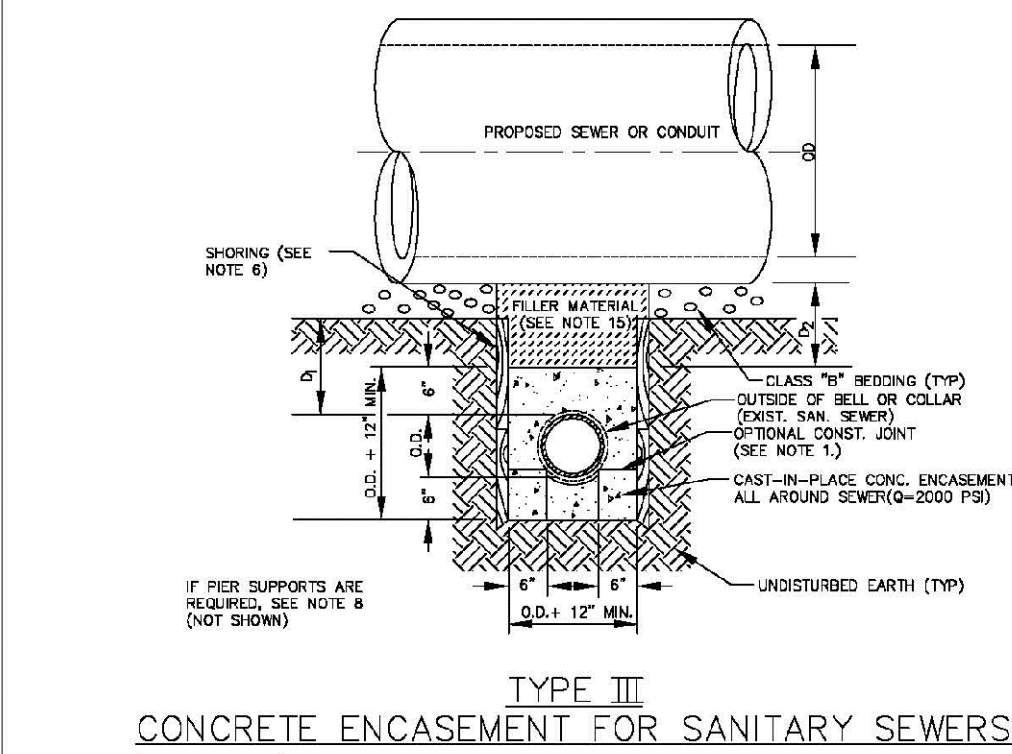
TYPE II
CONCRETE ENCASMENT FOR SANITARY SEWERS CROSSING OVER OR UNDER WATER MAIN

GENERAL NOTES FOR TYPE IIa & IIb ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED & BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY, A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
 - TYPE III ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF $d_1 \leq 18"$ ($d_2 \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_1 .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, OR WHERE UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- FILLER MATERIAL BETWEEN CONDUITS TO BE:
 - APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC. IF $d_1 \leq 4"$ & $d_2 \leq 5"$.
 - COMPACTED CLASS "D" BEDDING IF $d_1 \leq 4"$ & $d_2 \leq 5"$ (IF $d_2 > 5"$ FOR TYPE II ENCASMENT POUR CONCRETE ON UNDISTURBED SOIL).
- SHORING OR SHIELDING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASMENT TYPE II	
SCALE: NONE	DATE: 2/96
APPROVED: JFN	5/98 4/01 1/06
DISTRICT ENGINEER	

2008 REVISION SHEET 7



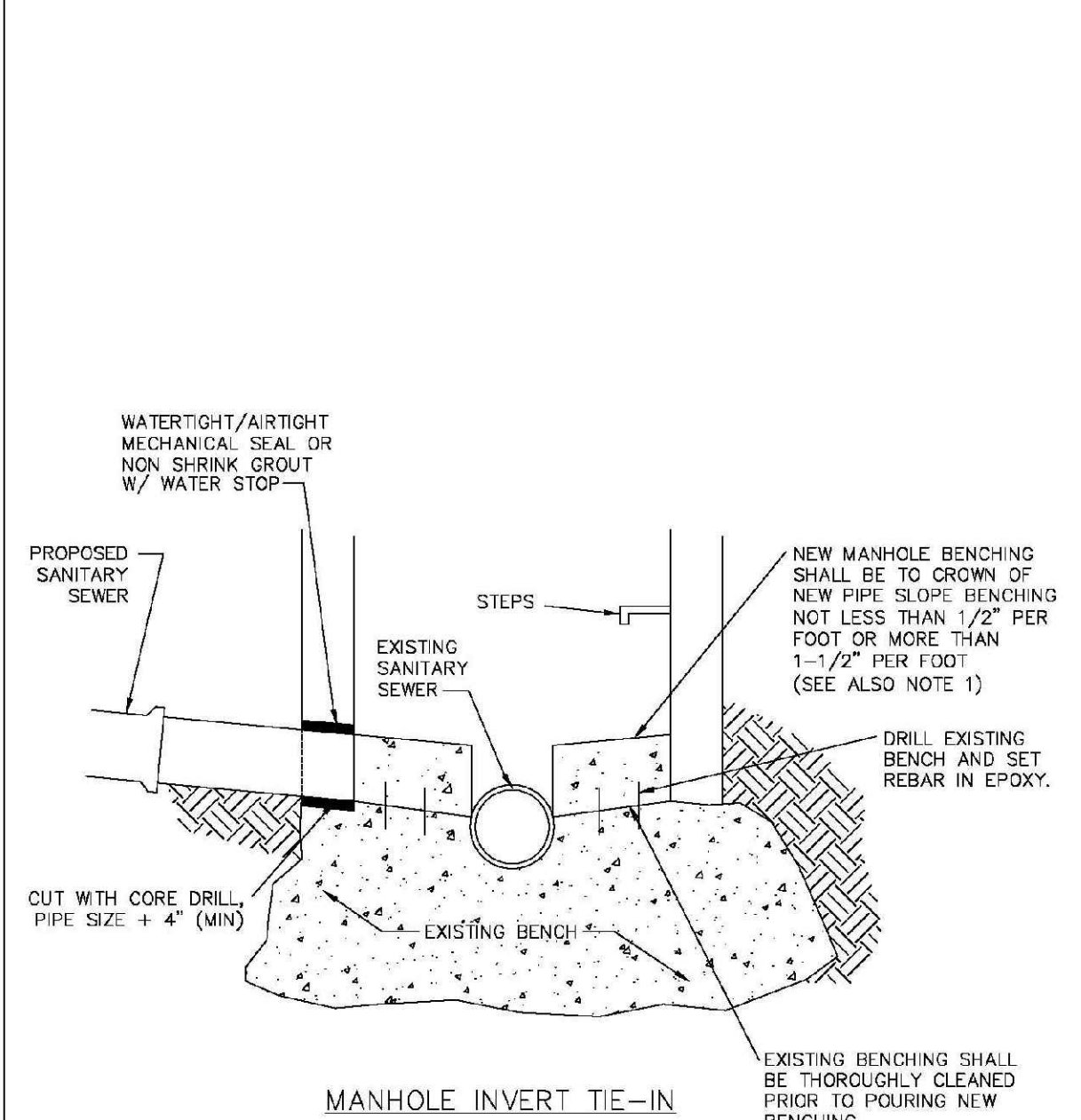
TYPE III
CONCRETE ENCASMENT FOR SANITARY SEWERS
(FULL ENCASMENT) NO SCALE

GENERAL NOTES FOR TYPE III ENCASMENT

- CONCRETE TO BE CAST AGAINST UNDISTURBED SOIL OR SHORING. IF OPTIONAL CONSTRUCTION JOINT IS USED & BOTTOM HALF OF ENCASMENT IS POURED SEPARATELY, A ONE INCH LAYER OF SAND OR MORTAR SHALL BE PLACED BETWEEN BOTTOM OF SANITARY SEWER AND TOP OF CONCRETE.
- LENGTH OF ENCASMENT FOR:
 - TYPE I & TYPE II ENCASMENT SHALL EXTEND FULL TRENCH WIDTH EXCAVATED FOR PROPOSED SEWER OR CONDUIT.
 - TYPE III ENCASMENT SHALL EXTEND AT LEAST 10 FEET EACH SIDE OF WATER MAIN.
- UNLESS OTHERWISE NOTED ON PLAN/PROFILE DRAWINGS, TYPE I, II & III ENCASMENTS NEED NOT BE REINFORCED. REINFORCEMENT, IF REQUIRED, TO BE SPECIFIED AND DETAILED SEPARATELY ON PLAN & PROFILE DRAWINGS.
- TYPE I, II OR III ENCASMENTS ARE REQUIRED UNDER FOLLOWING CONDITIONS:
 - TYPE I OR TYPE II IF $d_1 \leq 18"$ ($d_2 \leq 12"$) EXCEPT FOR SANITARY SEWER CROSSING OVER OR UNDER WATER MAINS.
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING UNDER WATER MAINS, REGARDLESS OF DIMENSION d_1 .
 - TYPE III IS REQUIRED FOR SANITARY SEWERS CROSSING OVER TOP OF WATER MAINS, REGARDLESS OF DIMENSION d_1 .
 - EXCEPT FOR UNUSUAL CIRCUMSTANCES, WATER MAIN CROSSINGS, OR WHERE UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, TYPE I ENCASMENT WILL NORMALLY BE SATISFACTORY.
 - IF THE SANITARY SEWER IS REPLACED OR CONSTRUCTED OF DUCTILE IRON PIPE (AWWA C-150 OR C-151), CONCRETE ENCASMENT MAY NOT BE REQUIRED.
- APPROVED COMPRESSIBLE MATERIAL SUCH AS STYROFOAM, ETC. IF $d_1 \leq 4"$ & $d_2 \leq 5"$.
- COMPACTED CLASS "D" BEDDING IF $d_1 \leq 4"$ & $d_2 \leq 5"$ (IF $d_2 > 5"$ FOR TYPE III ENCASMENT POUR CONCRETE ON UNDISTURBED SOIL).
- SHORING OR SHIELDING, IF USED, TO BE CUT OFF AT TOP OF ENCASMENT.
- THESE ENCASMENT DETAILS MAY ALSO BE APPLICABLE FOR CONDUITS OTHER THAN STORM OR SANITARY SEWER INSTALLATIONS.
- IN CERTAIN SITUATIONS WHERE CONDUIT DIAMETER "D" IS EXTREMELY LARGE, PIPE SUPPORTS ON EACH SIDE OF SANITARY SEWER MAY ALSO BE REQUIRED. IF REQUIRED, SUPPORTS SHALL BE SPECIFIED AND DETAILED SEPARATELY ON PLAN AND PROFILE DRAWINGS.
- CONCRETE ENCASED PIPING SHALL BE UNID WITH FULT LAYER.

PARKER WATER & SANITATION DISTRICT	
CONCRETE ENCASMENT TYPE III	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	5/98 1/06 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET S4.8

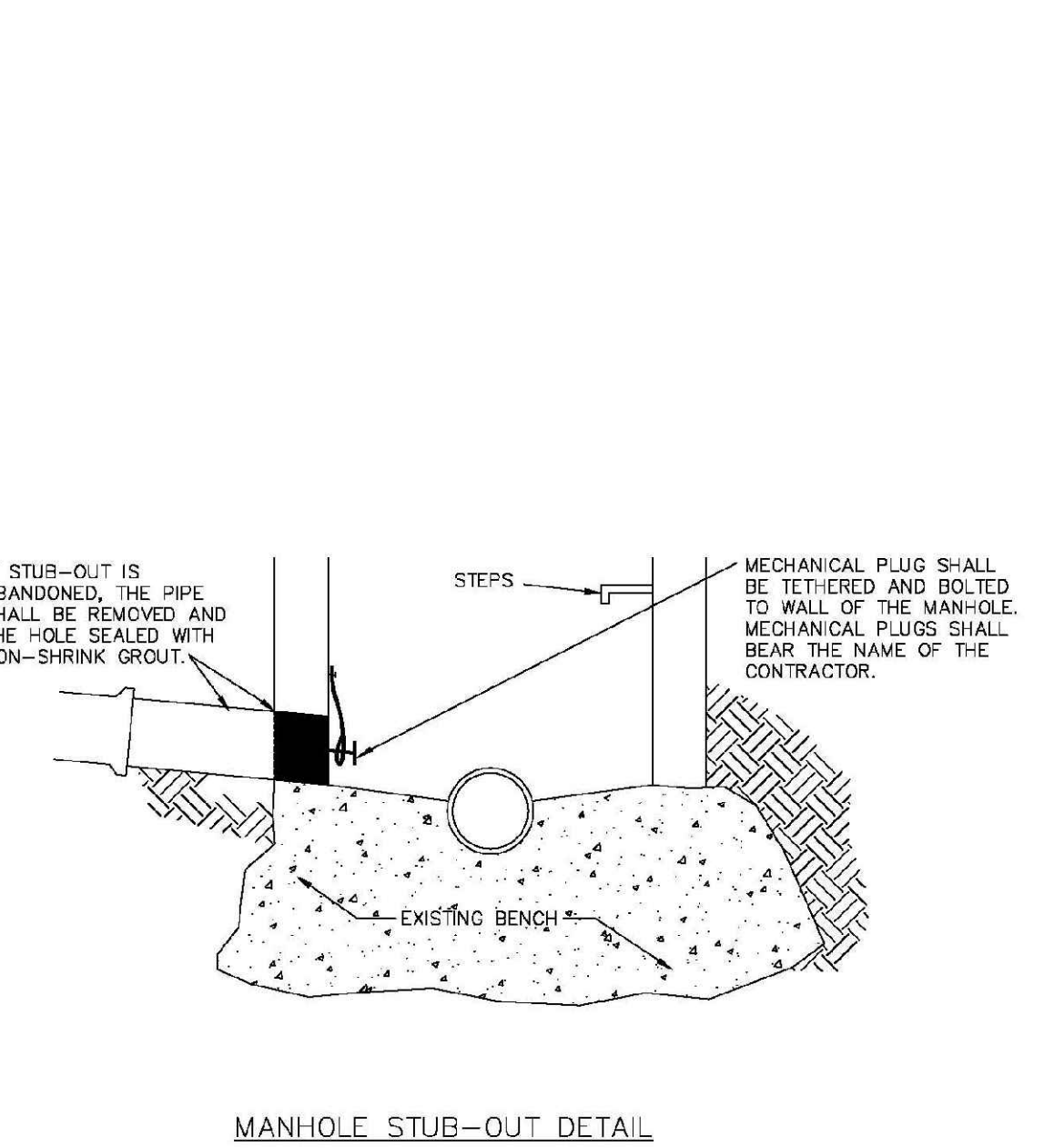


MANHOLE INVERT TIE-IN

NOTES
1 - NEW BENCH SHALL INCLUDE REINFORCEMENT TO CONTROL CONCRETE CRACKING.

PARKER WATER & SANITATION DISTRICT	
MANHOLE INVERT TIE-IN DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/78 12/76
DIRECTOR OF ENGINEERING	

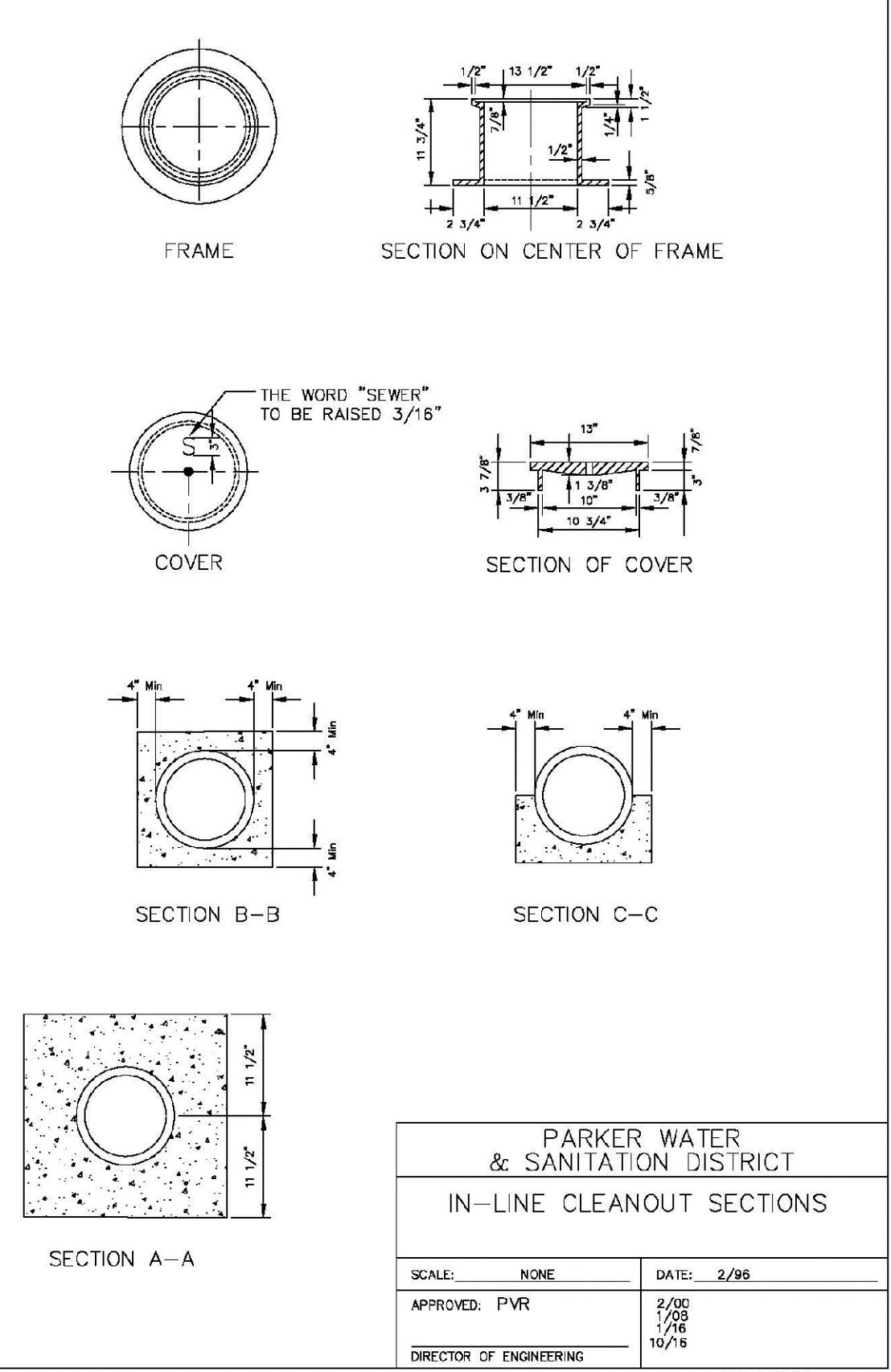
2016 REVISION SHEET S4.9



MANHOLE STUB-OUT DETAIL

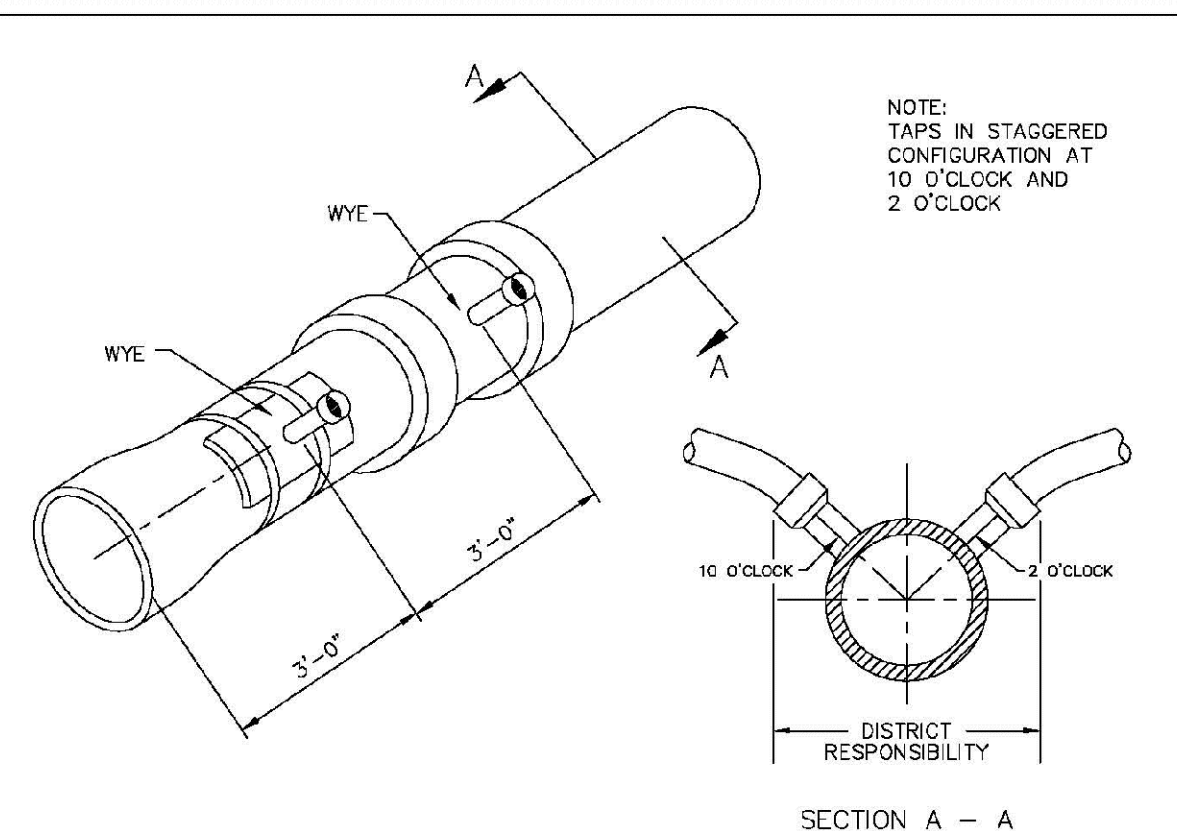
PARKER WATER & SANITATION DISTRICT	
MANHOLE STUB-OUT DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/78 10/76
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET S4.10



PARKER WATER & SANITATION DISTRICT	
IN-LINE CLEANOUT SECTIONS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	2/00 7/96 10/78
DIRECTOR OF ENGINEERING	

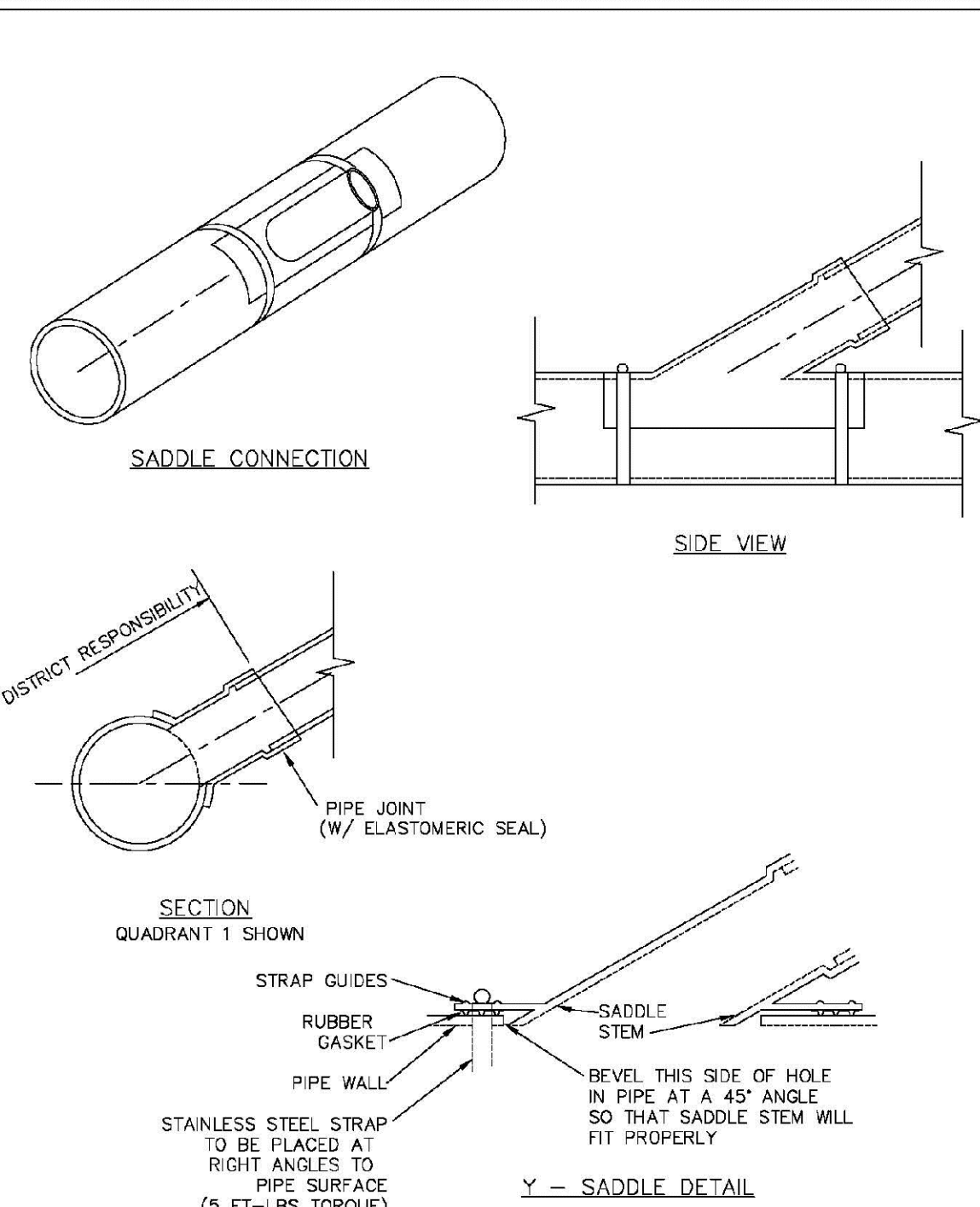
2016 REVISION SHEET S4.12



DOMESTIC SEWER TAPPING DETAIL

PARKER WATER & SANITATION DISTRICT	
DOMESTIC SEWER TAPPING DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	4/01 1/08 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET S4.13



- NOTES:
- SADDLE FITTINGS TO BE PER ASTM D3034.
 - CONNECTION SHALL BE Y - SADDLE WITH TWO BONDS

PARKER WATER & SANITATION DISTRICT	
P.V.C. SADDLE CONNECTION DETAIL	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	1/78 10/76
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET S4.14

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Fax: (720) 482-9546

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HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
SANITARY SEWER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: RHR
CHECKED BY: BPW
DATE: JUNE 2018

SHEET NUMBER **14**

Revisions: No. Date Init. Appr. Date

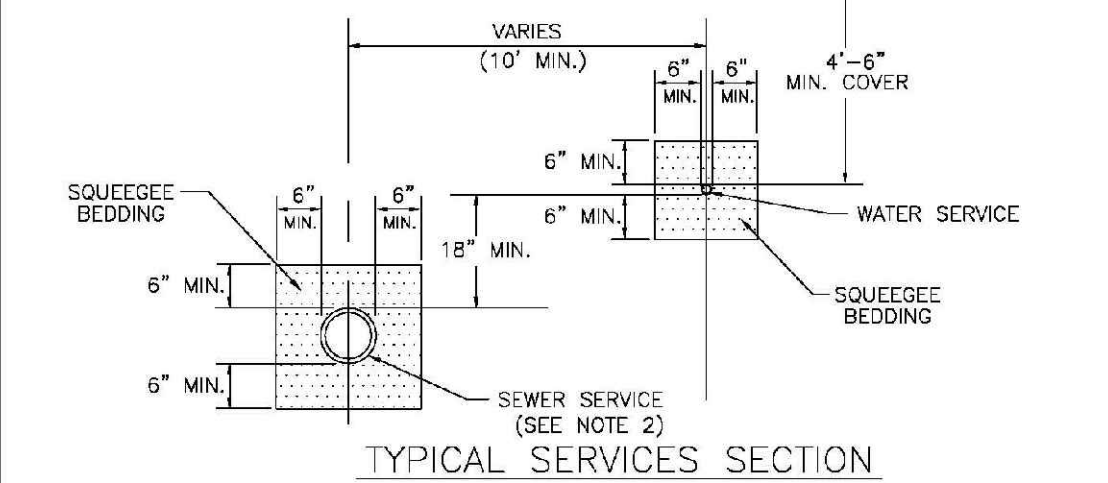
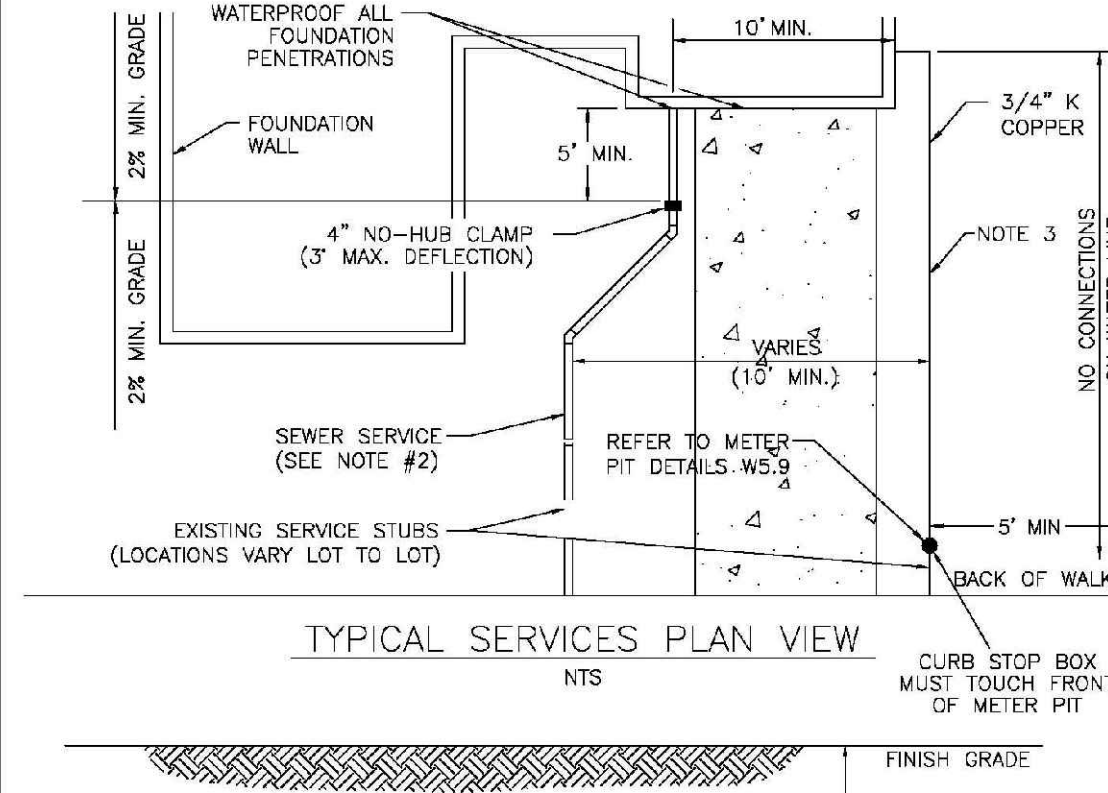
- INSPECTION POLICY:**
1. ALL SERVICE INSPECTIONS MUST BE SCHEDULED AT LEAST 24 HOURS IN ADVANCE OF THE REQUESTED INSPECTION.
 2. SERVICE INSPECTIONS WILL OCCUR BETWEEN 1:00 P.M. AND 3:00 P.M. SPECIFIC INSPECTION TIMES ARE NOT AVAILABLE.
 3. IF THE CONTRACTOR IS NOT READY FOR INSPECTION WHEN THE INSPECTOR ARRIVES AT THE SITE OR SERVICE FAILS, A RE-INSPECTION WILL HAVE TO BE SCHEDULED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE AND A RE-INSPECTION FEE CHARGED.
 4. SHOULD THE SERVICE LINES BE DAMAGED BY LATER CONSTRUCTION, AN INSPECTION OF THE REPAIR WILL BE REQUIRED IN ACCORDANCE WITH NOTES 1 AND 2 ABOVE.
 5. THE CONTRACTOR SHALL LEAVE ALL PIPE AND FITTINGS EXPOSED FOR THE INSPECTOR TO OBSERVE. INSPECTORS WILL NOT ENTER ANY EXCAVATIONS TO CHECK MATERIALS. THE TOP LAYER OF BEDDING CAN BE ADDED AFTER THE INSPECTION HAS BEEN COMPLETED.
 6. ALL EXCAVATIONS SHALL BE IN ACCORDANCE WITH OSHA STANDARDS.
 7. LOTS WITHOUT BUILDING ADDRESSES BEFORE DISTRICT INSPECTION OR METER SET WILL FAIL AUTOMATICALLY.
 8. CONTRACTOR MUST BE PRESENT AT TIME OF INSPECTION, UNLESS COORDINATED WITH DISTRICT INSPECTOR.

- INSTALLATION NOTES:**
- WATER**
1. ACCEPTABLE PIPE MATERIALS SHALL BE K-COPPER TUBING, (3/4" MIN.)
 2. APPROVED BEDDING TO BE SQUEEGEE.
 3. ONLY ONE COUPLING WILL BE ALLOWED BETWEEN THE SUB-IN AND BUILDING. COMPRESSION COUPLINGS WILL NOT BE ALLOWED ON NEW CONSTRUCTION. SILVER SOLDERED JOINTS MUST BE USED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWS BEFORE BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.
 4. A WATER SERVICE WHICH CROSSES A SEWER SERVICE CAN DO SO ONLY AT A 45-90° ANGLE. WATER SERVICES SHALL BE LOCATED A MINIMUM OF 18" ABOVE SEWER SERVICE.
 5. WATER SERVICE FOUNDATION PENETRATIONS SHALL BE WATERPROOFED USING MASTIC OR OTHER APPROVED METHOD. CRAWL SPACE REQUIRES CONTINUOUS COPPER WITH A 1" BURY.
 6. CURB STOP MUST BE PLUMB AND CENTERED OVER THE NUT. IT SHOULD BE STRAPPED TO THE METER PIT (RESIDENTIAL INSTALLATIONS) OR CENTERED OVER THE EASEMENT LINE (COMMERCIAL INSTALLATIONS). THE ASSEMBLY MUST BE AT OR SLIGHTLY ABOVE FINISHED GRADE.
 7. MOVED CURB BOXES MUST BE INSPECTED BY PWS PRIOR TO BURIAL.
 8. WATERLINE MUST BE ATTACHED TO A SUPPORT BOARD THAT IS MOUNTED TO THE WALL.
 9. NO VOIDS ALLOWED UNDER WATERLINES FROM STOP BOX TO FOUNDATION.
 10. CURBSTOP BOXES AND METER PITS CANNOT BE IN DRIVEWAYS.
 11. ONLY 3/4" (JUMPER) PIPES (RESIDENCES) ARE ALLOWED. (JUMPER) PIPES WILL BE REMOVED PRIOR TO METER SET DATE.
 12. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:
"X" FOR SANITARY SEWER SERVICE
"W" FOR WATER SERVICES
 13. NO SPLICES OR FLARED COUPLINGS ALLOWED ON SERVICES LARGER THAN 3/4". SILVER SOLDERED JOINTS MUST BE INSPECTED BY PWS PRIOR TO BURIAL. FLARED COUPLINGS WILL BE ALLOWED ON ALL SERVICES 3/4" AND SMALLER.

PARKER WATER & SANITATION DISTRICT	
DISTRICT POLICIES & INSTALLATION NOTES FOR WATER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: 1/04	1/16
PVR	10/16
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET W1.1



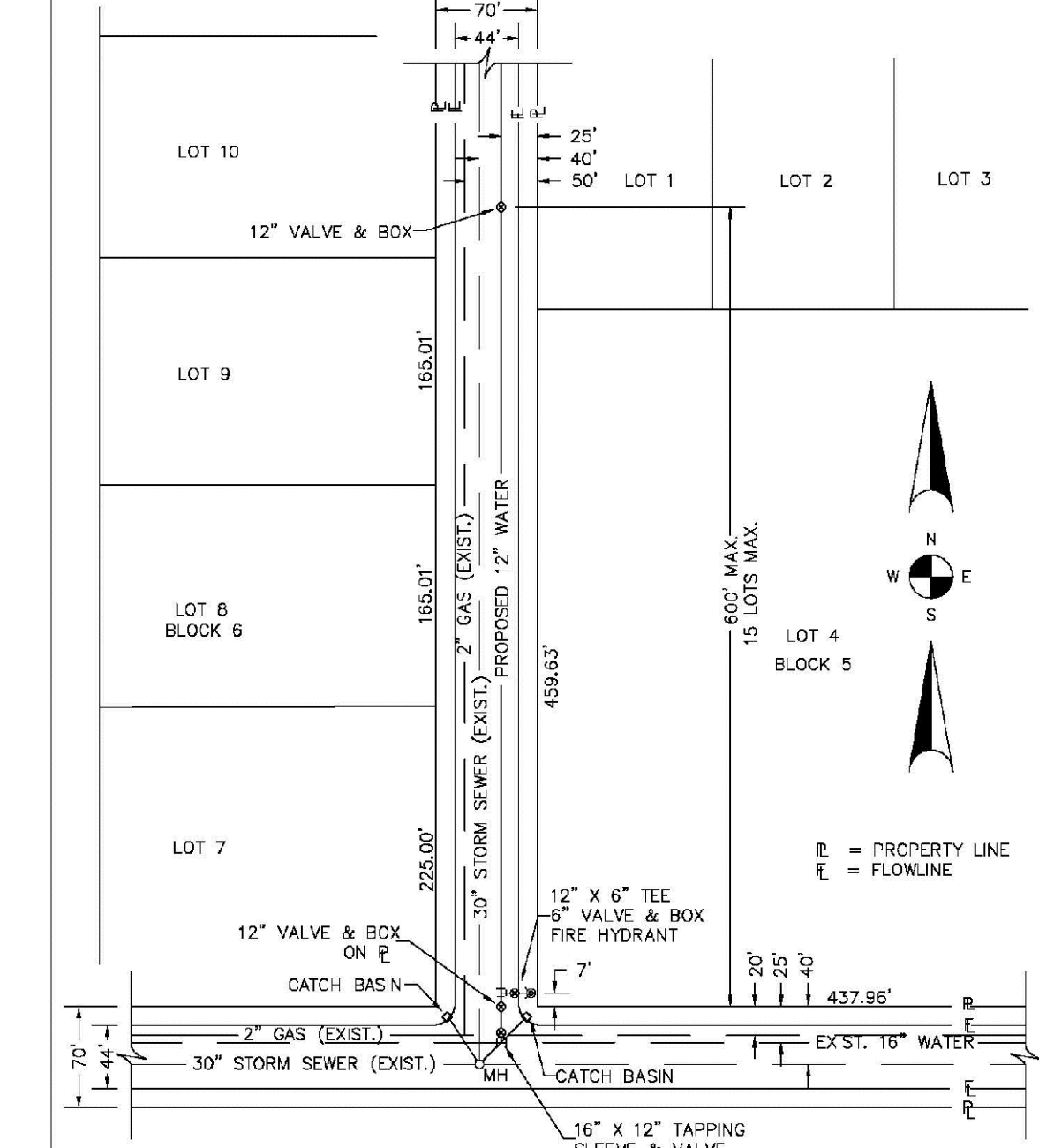
NOTE:

1. SEE SHEET W1.1 FOR DISTRICT POLICIES AND INSTALLATION NOTES.
2. REFER TO SEWER SERVICES DETAIL SHEET S1.2.
3. 4" PVC SLEEVES REQUIRED FOR SERVICE LINES UNDER CONCRETE SURFACE.

PARKER WATER & SANITATION DISTRICT	
TYPICAL WATER SERVICES	
SCALE: NONE	DATE: 2/96
APPROVED: 1/04	10/16
PVR	12/07
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET W1.2



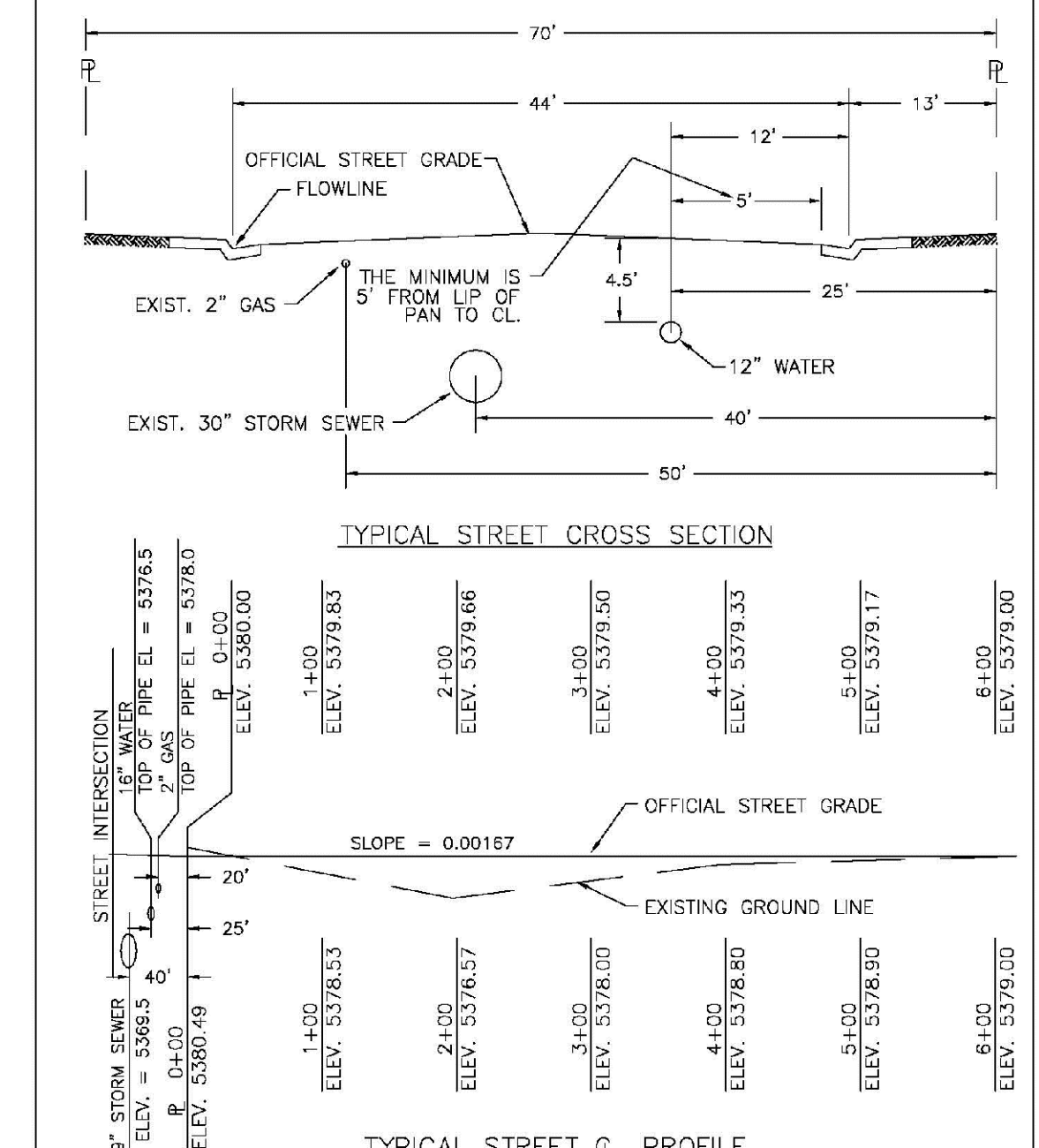
NOTES:

1. SEE "TYPICAL STREET CROSS SECTION - TYPICAL STREET Q1 PROFILE" DRAWING.
2. ALL FIRE HYDRANTS TO BE LOCATED AT POINTS OTHER THAN CORNER INTERSECTIONS SHALL BE INSTALLED AT A LOT LINE EXTENDED.

PARKER WATER & SANITATION DISTRICT	
WATER DISTRIBUTION SYSTEM TYPICAL PLAN	
SCALE: NONE	DATE: 2/96
APPROVED: 1/16	10/16
PVR	
DIRECTOR OF ENGINEERING	

2016 REVISION

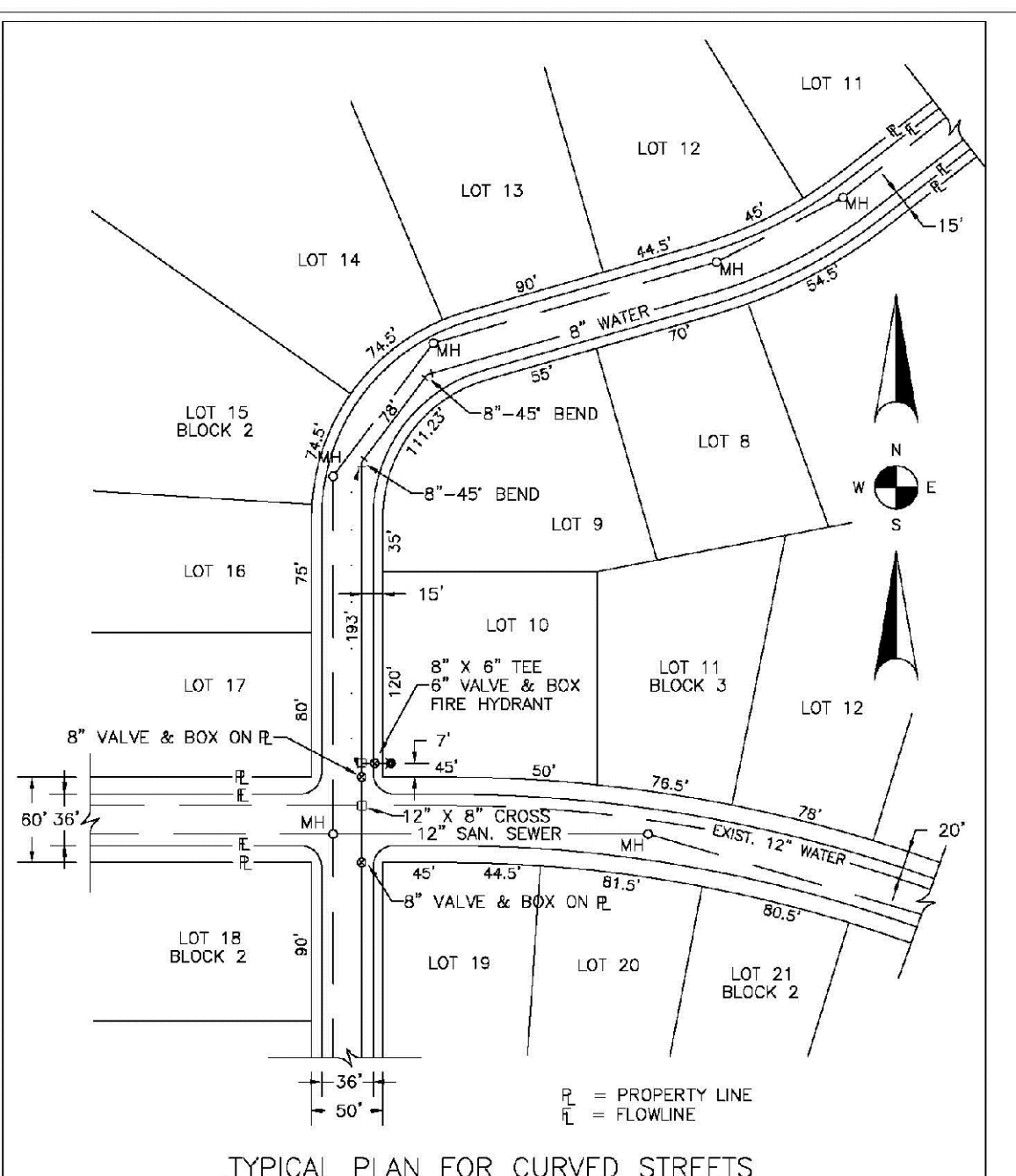
SHEET W2.1



PARKER WATER & SANITATION DISTRICT	
TYPICAL STREET CROSS SECTION	
SCALE: NONE	DATE: 2/96
APPROVED: 1/16	10/16
PVR	
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET W2.2

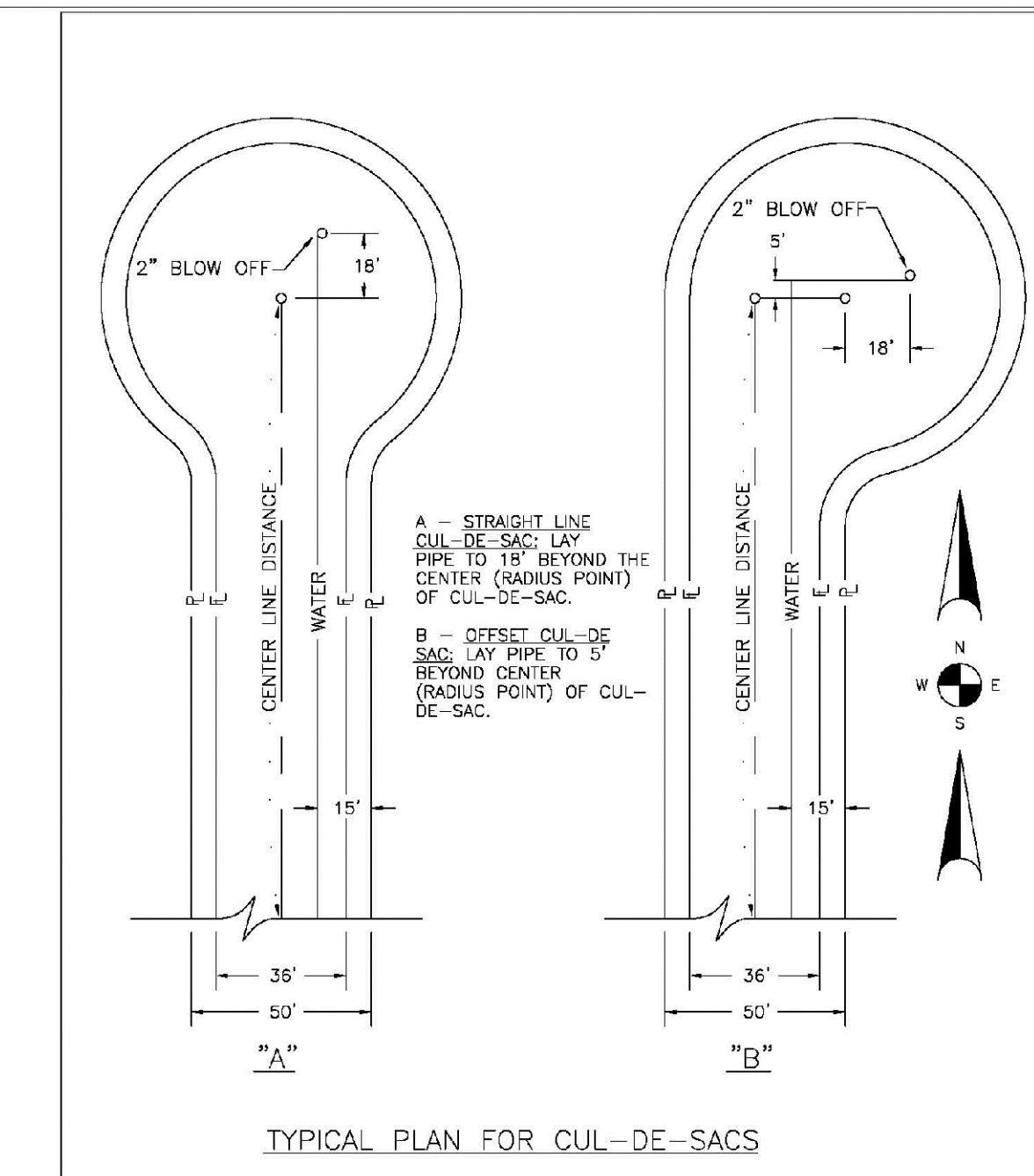


NOTE: WATER AND SEWER MAY NEVER BE CLOSER THAN 10' HORIZONTALLY AND MUST MAINTAIN A MINIMUM OF 5' FROM THE LIP OF PAN ON THE GUTTER.

PARKER WATER & SANITATION DISTRICT	
WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CURVED STREETS	
SCALE: NONE	DATE: 2/96
APPROVED: 1/16	10/16
PVR	
DIRECTOR OF ENGINEERING	

2016 REVISION

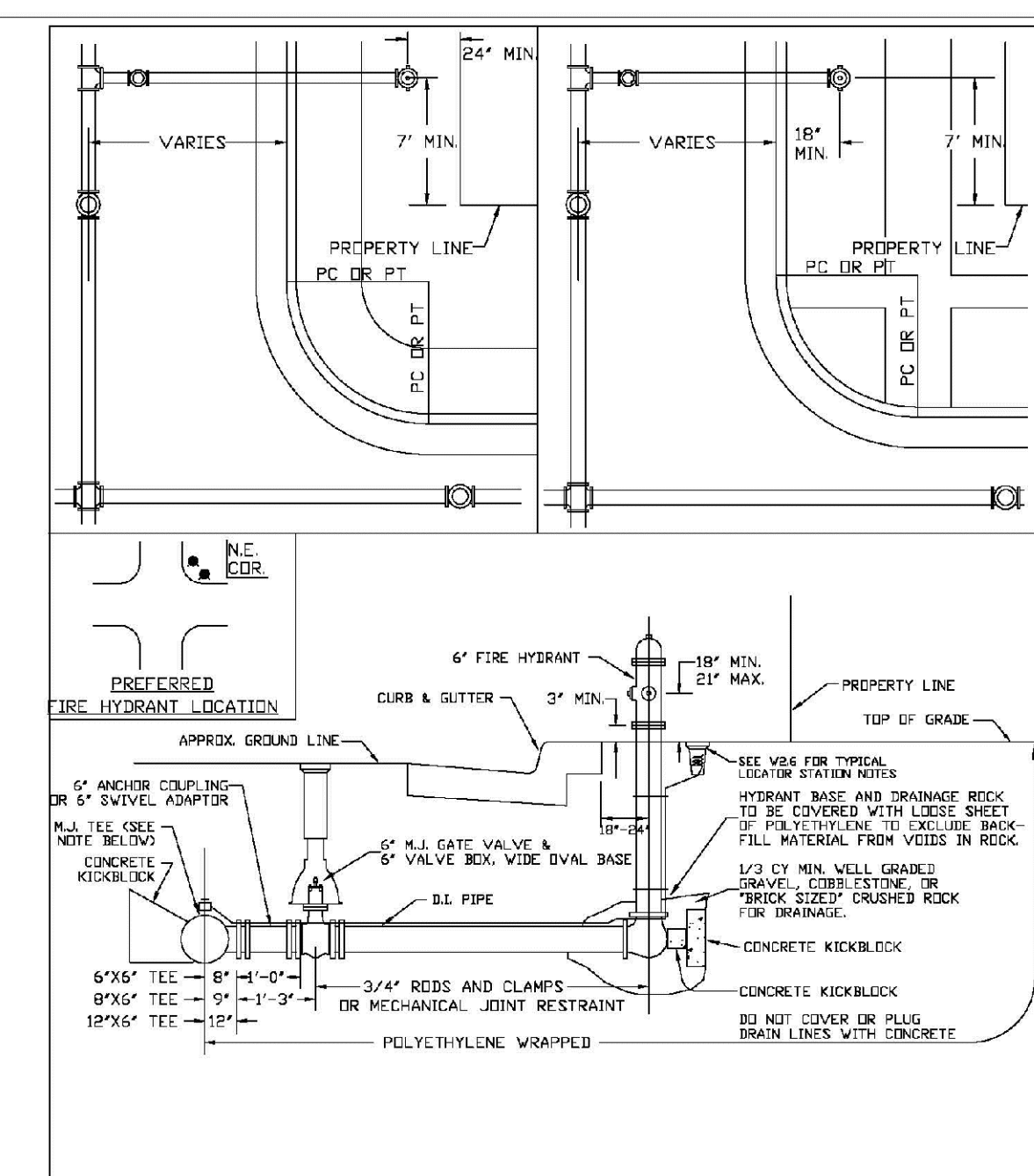
SHEET W2.3



PARKER WATER & SANITATION DISTRICT	
WATER DISTRIBUTION SYSTEM TYPICAL PLAN FOR CUL-DE-SACS	
SCALE: NONE	DATE: 2/96
APPROVED: 1/16	10/16
PVR	
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET W2.4



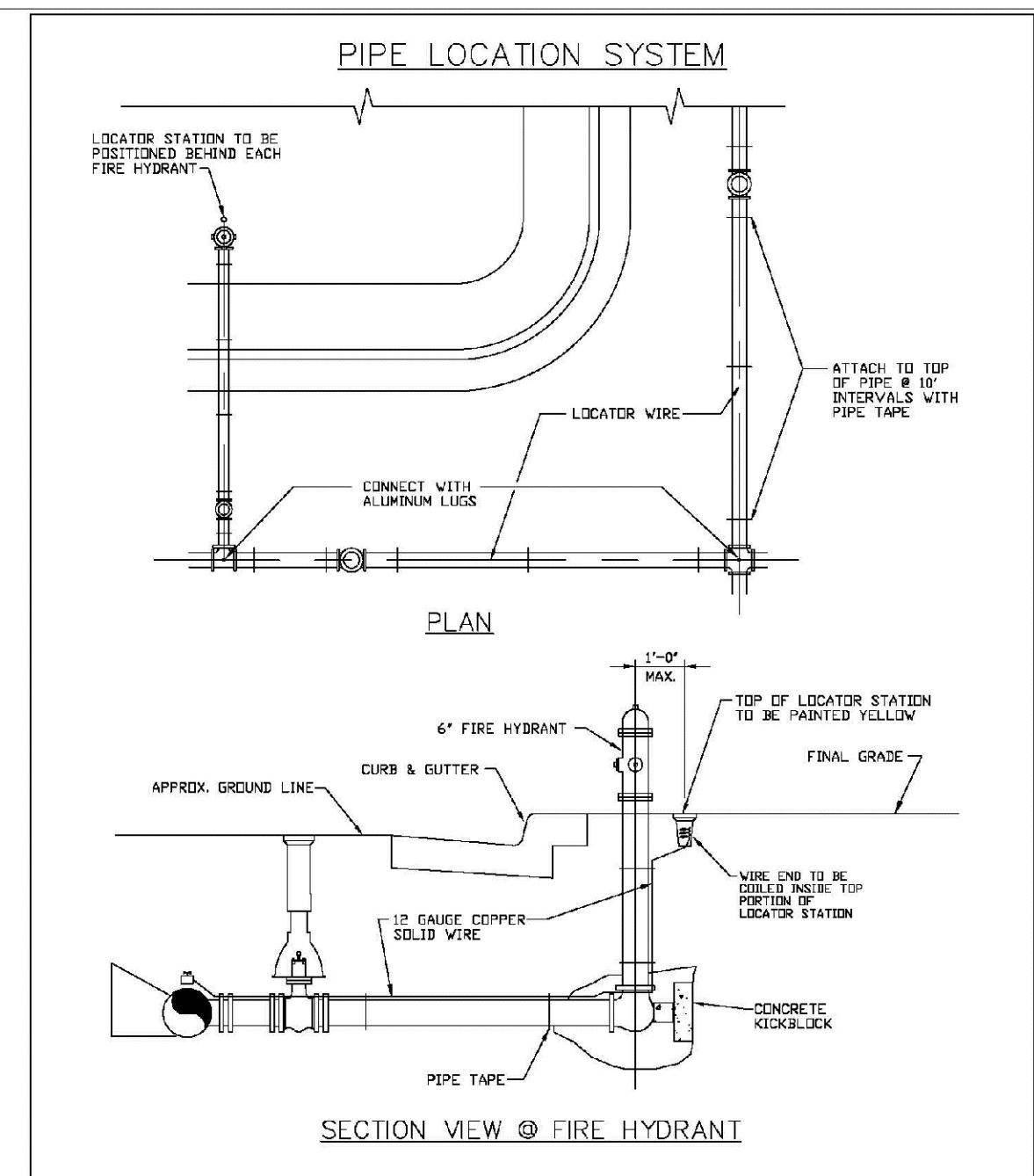
NOTES:

1. ALTERNATE TO FIG ABOVE: FASTEN ALL VALVE DIRECTLY TO A 4\"/>
- 2. NO HORIZONTAL OR VERTICAL BENDS ARE ALLOWED IN FIRE HYDRANT BRANCH.
- 3. A CONTINUITY TEST WILL BE REQUIRED PRIOR TO COMPLETION. ACCEPTANCE.

PARKER WATER & SANITATION DISTRICT	
FIRE HYDRANTS LOCATION & INSTALLATION	
SCALE: NONE	DATE: 2/96
APPROVED: 4/01	10/16
PVR	10/27
DIRECTOR OF ENGINEERING	

2016 REVISION

SHEET W2.5



NOTES:

1. FOR USE BY ALL DISTRICT SENIORS AND PWS WATER MAINS.
2. LOCATOR STATION POSITION MAY BE VERIFIED AT THE DIRECTION OF THE DISTRICT ENGINEER.
3. A CONTINUITY TEST WILL BE REQUIRED PRIOR TO COMPLETION. ACCEPTANCE.

PARKER WATER & SANITATION DISTRICT	
LOCATOR WIRE DETAILS	
SCALE: NONE	DATE: 2/96
APPROVED: 4/01	10/16
PVR	10/16
DIRECTOR OF ENGINEERING	

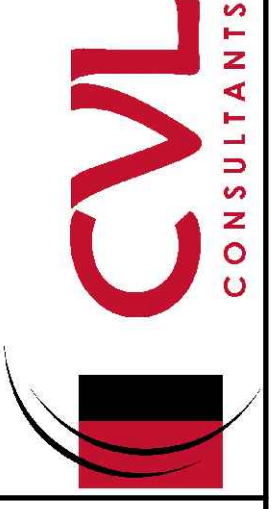
2016 REVISION

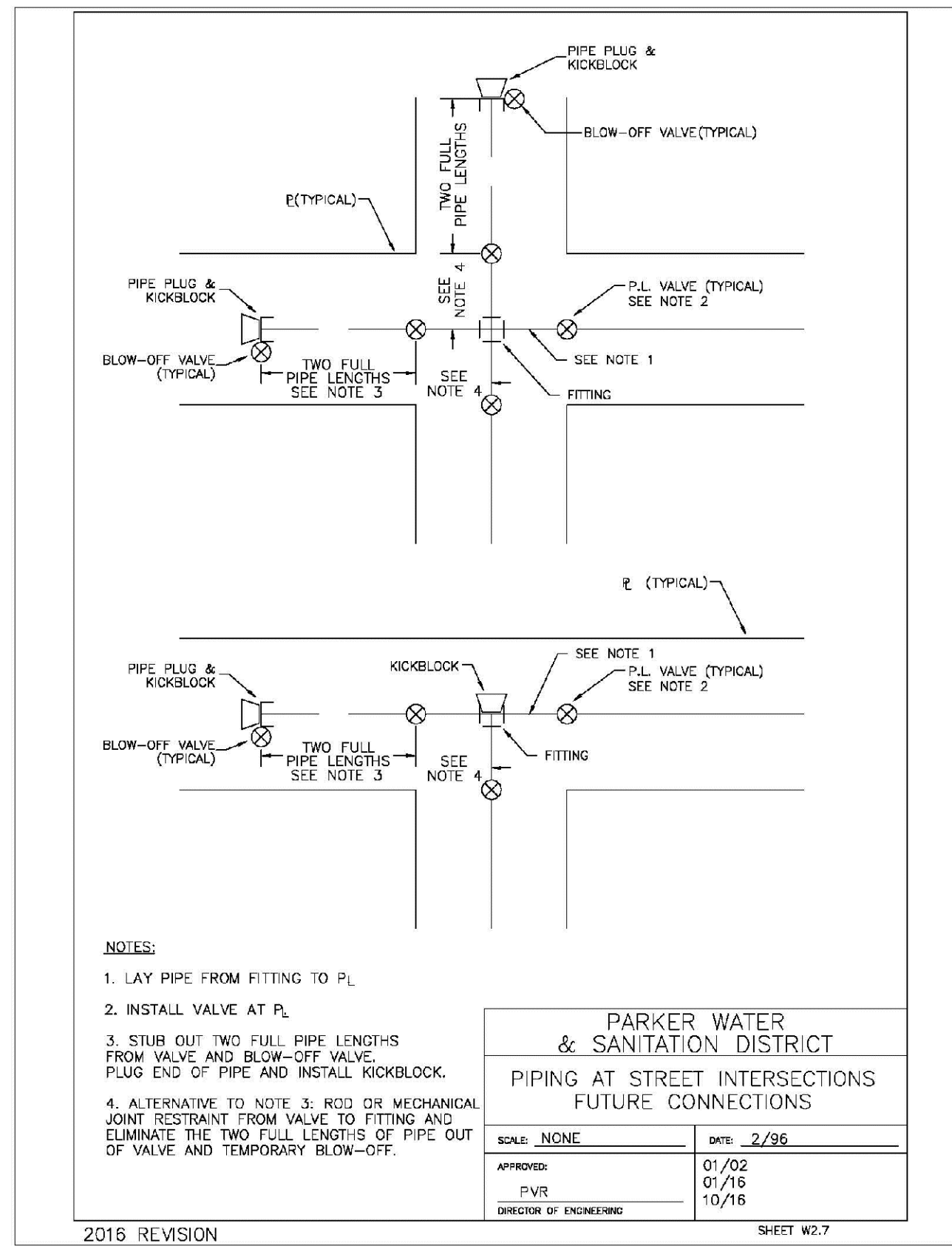
SHEET W2.6

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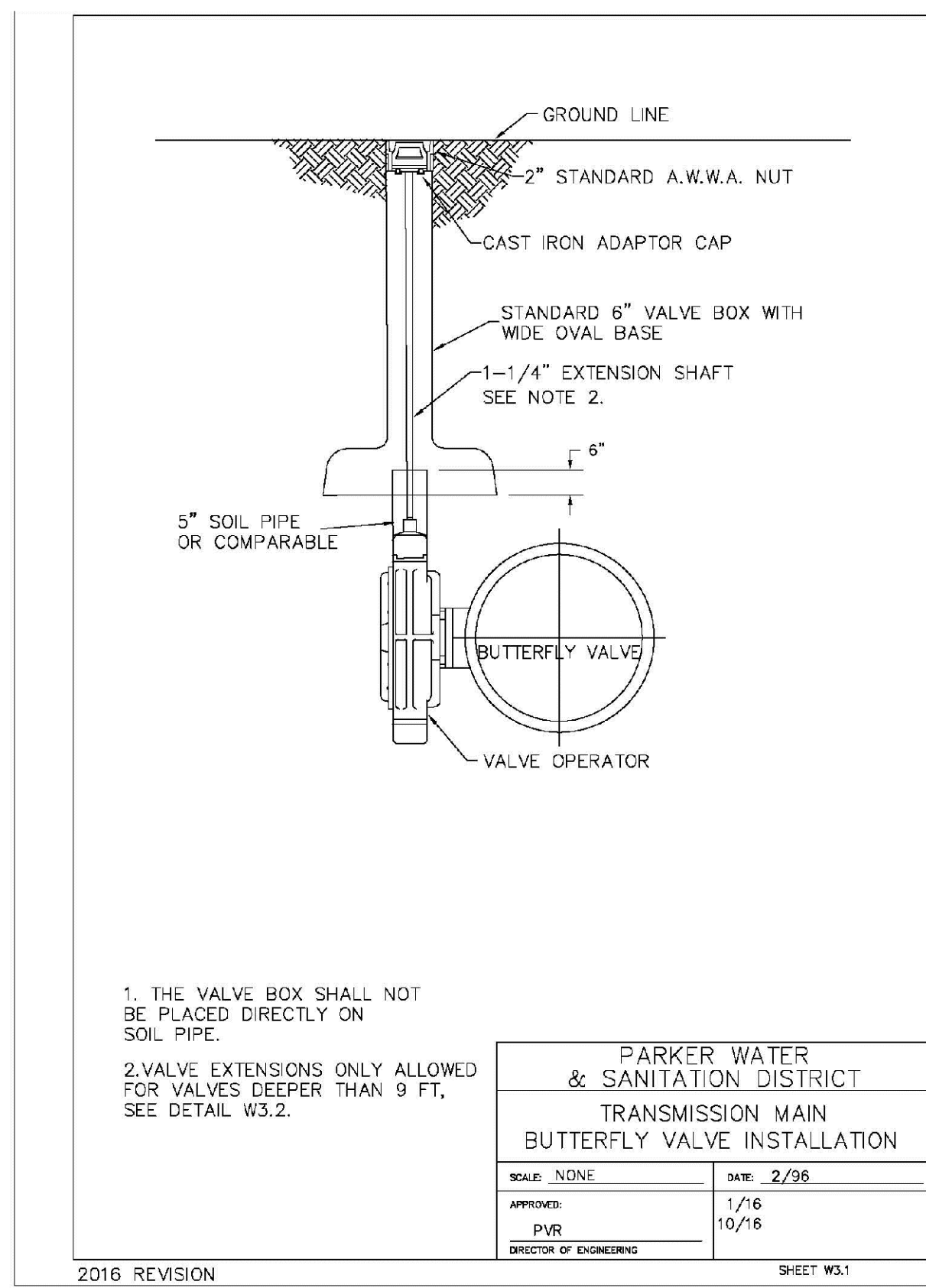
SHEET NUMBER	DRAWN BY: RHR	CHECKED BY: BPW	DATE: JUNE 2018	SCALE: AS SHOWN	FILE NO: 8130283701	Revisions	Date	Appr.	Date
				TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER DETAILS	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112				
15									





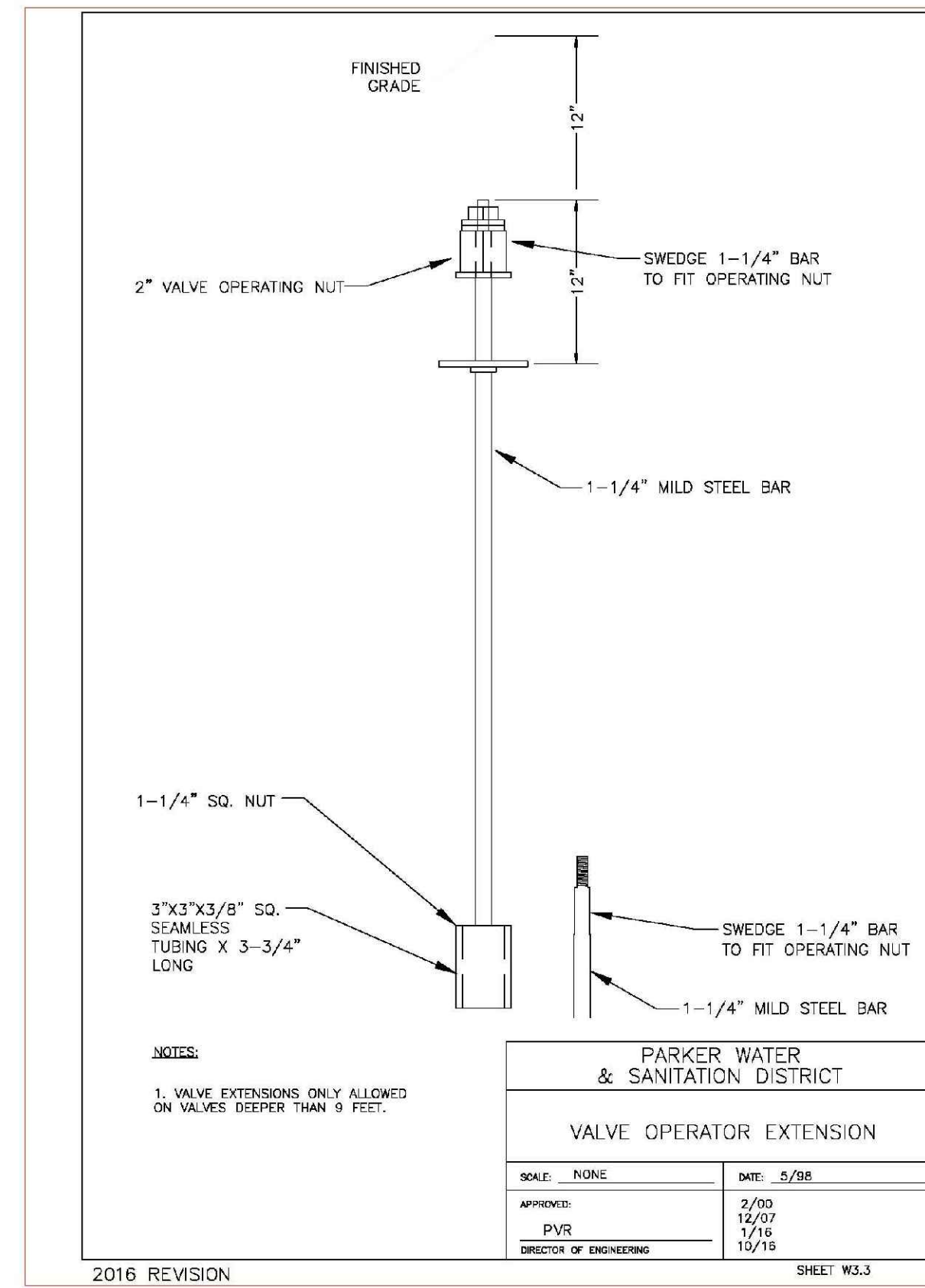
PARKER WATER & SANITATION DISTRICT PIPING AT STREET INTERSECTIONS FUTURE CONNECTIONS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.7



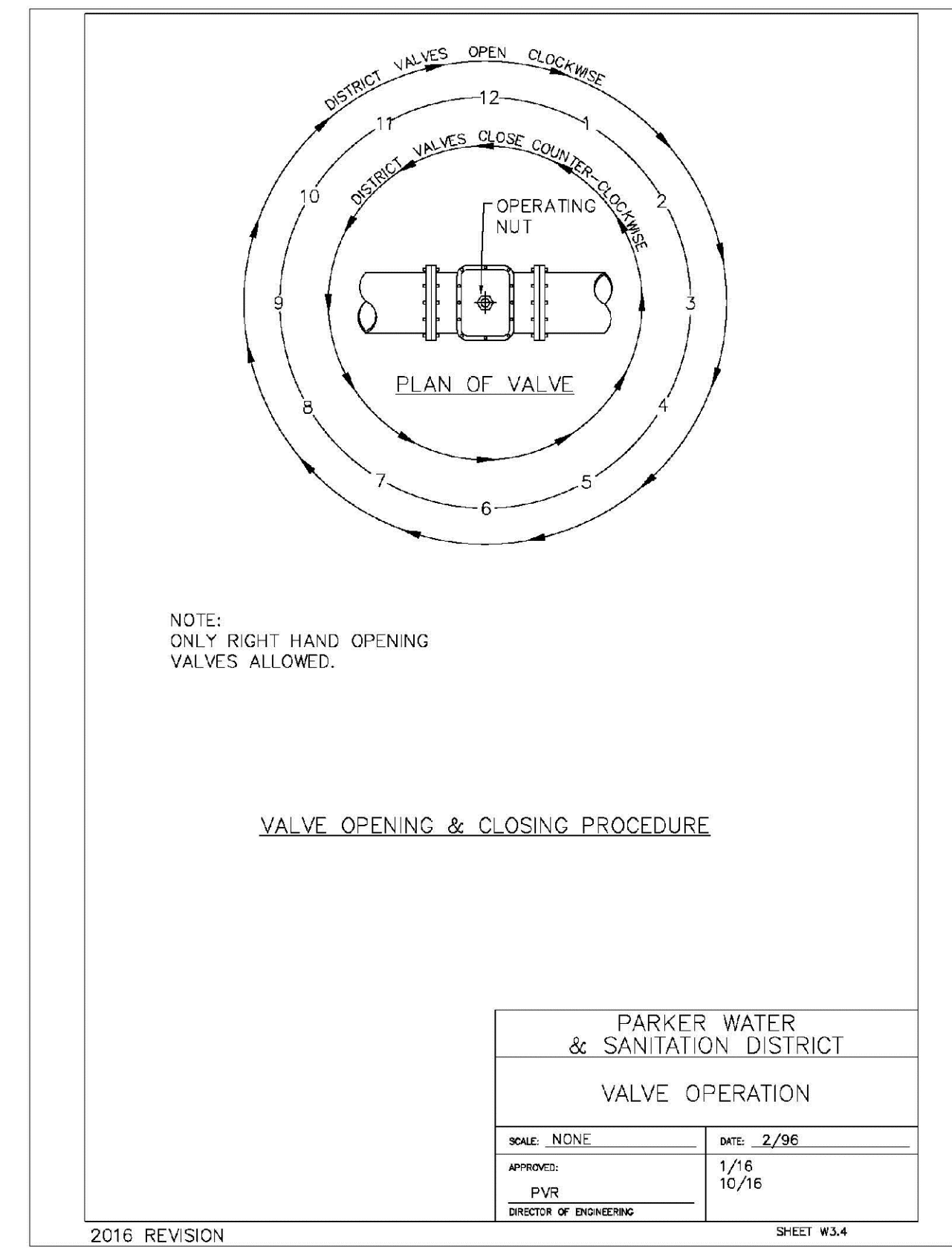
PARKER WATER & SANITATION DISTRICT TRANSMISSION MAIN BUTTERFLY VALVE INSTALLATION	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.1



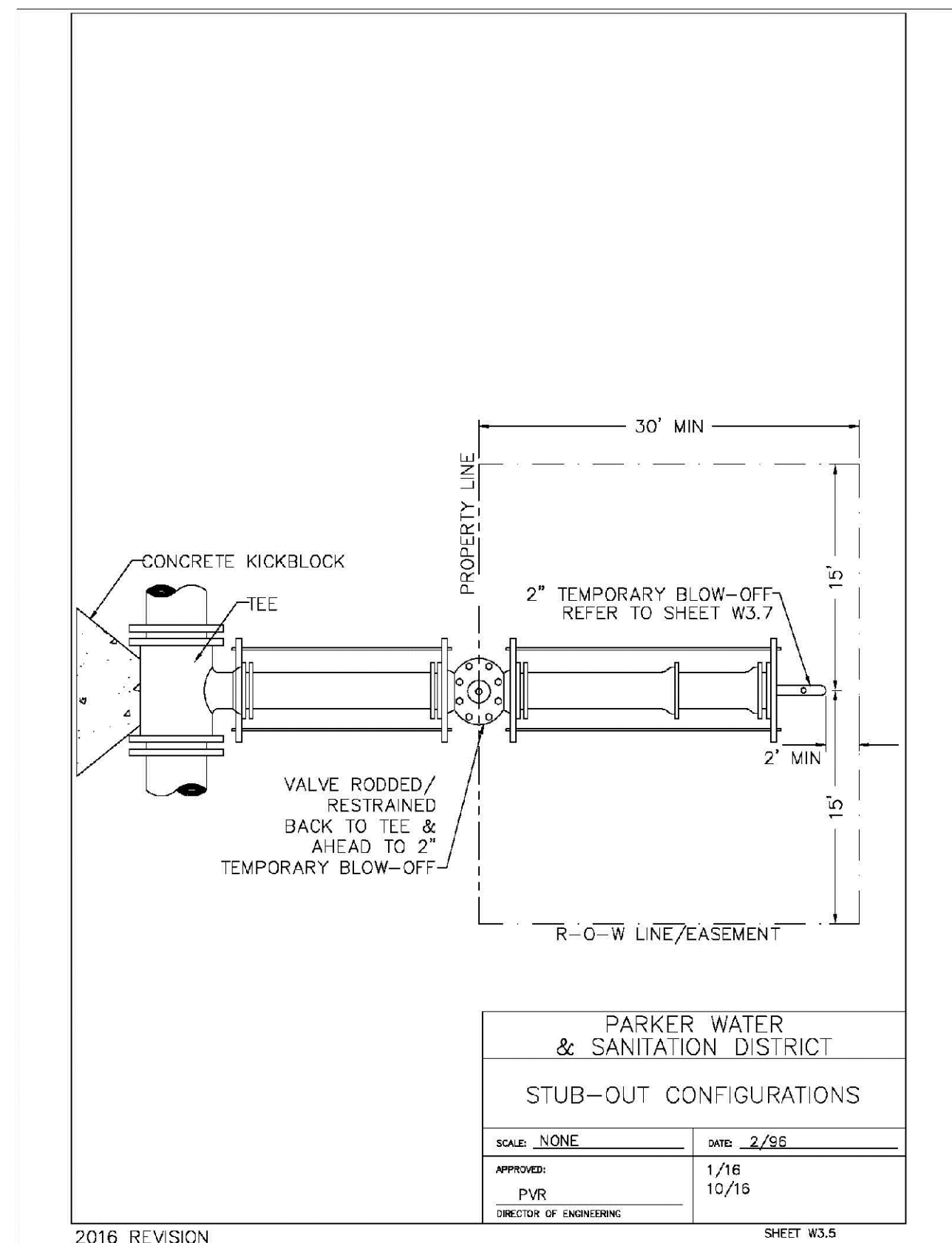
PARKER WATER & SANITATION DISTRICT VALVE OPERATOR EXTENSION	
SCALE: NONE	DATE: 5/98
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.3



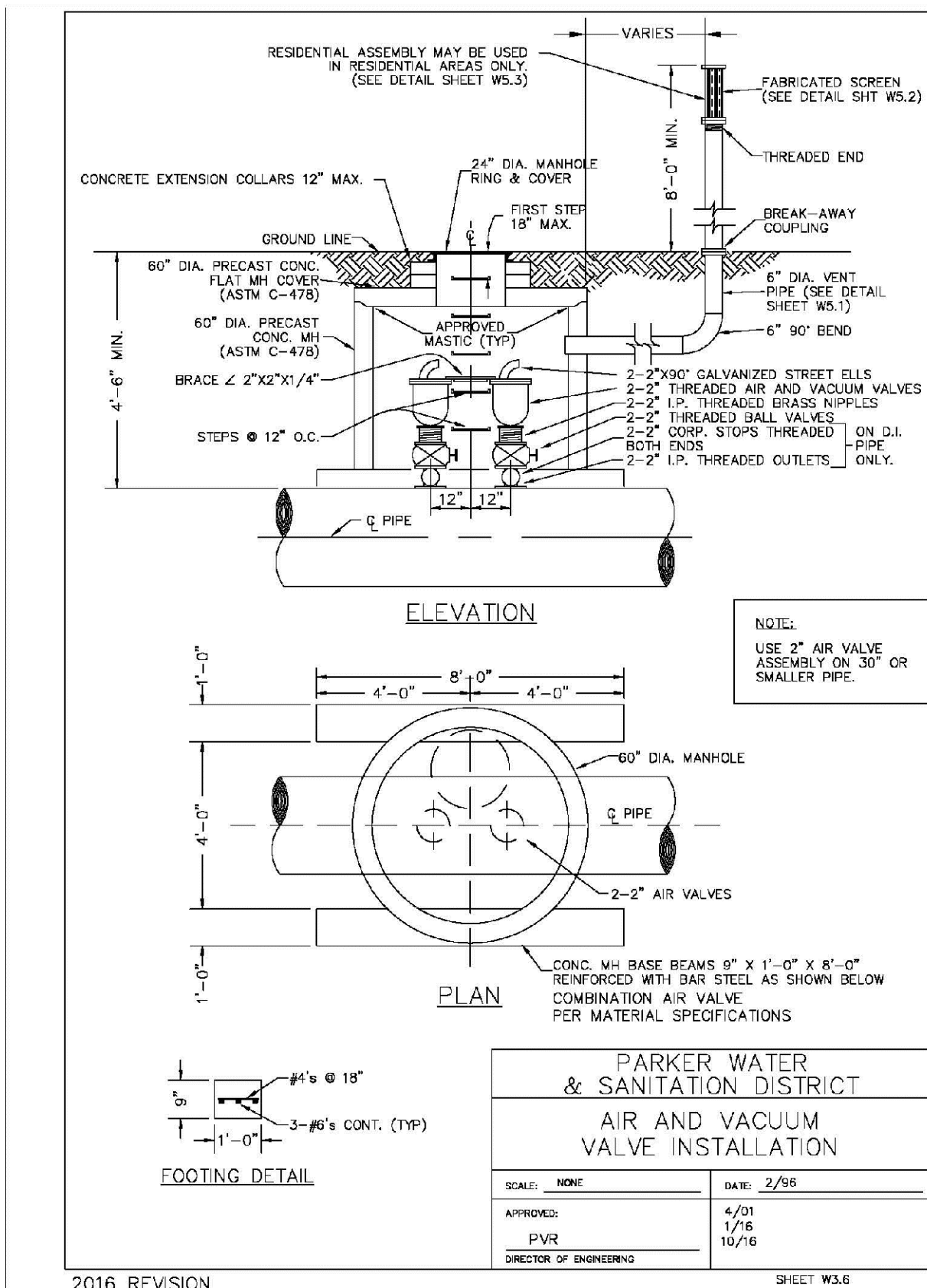
PARKER WATER & SANITATION DISTRICT VALVE OPERATION	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.4



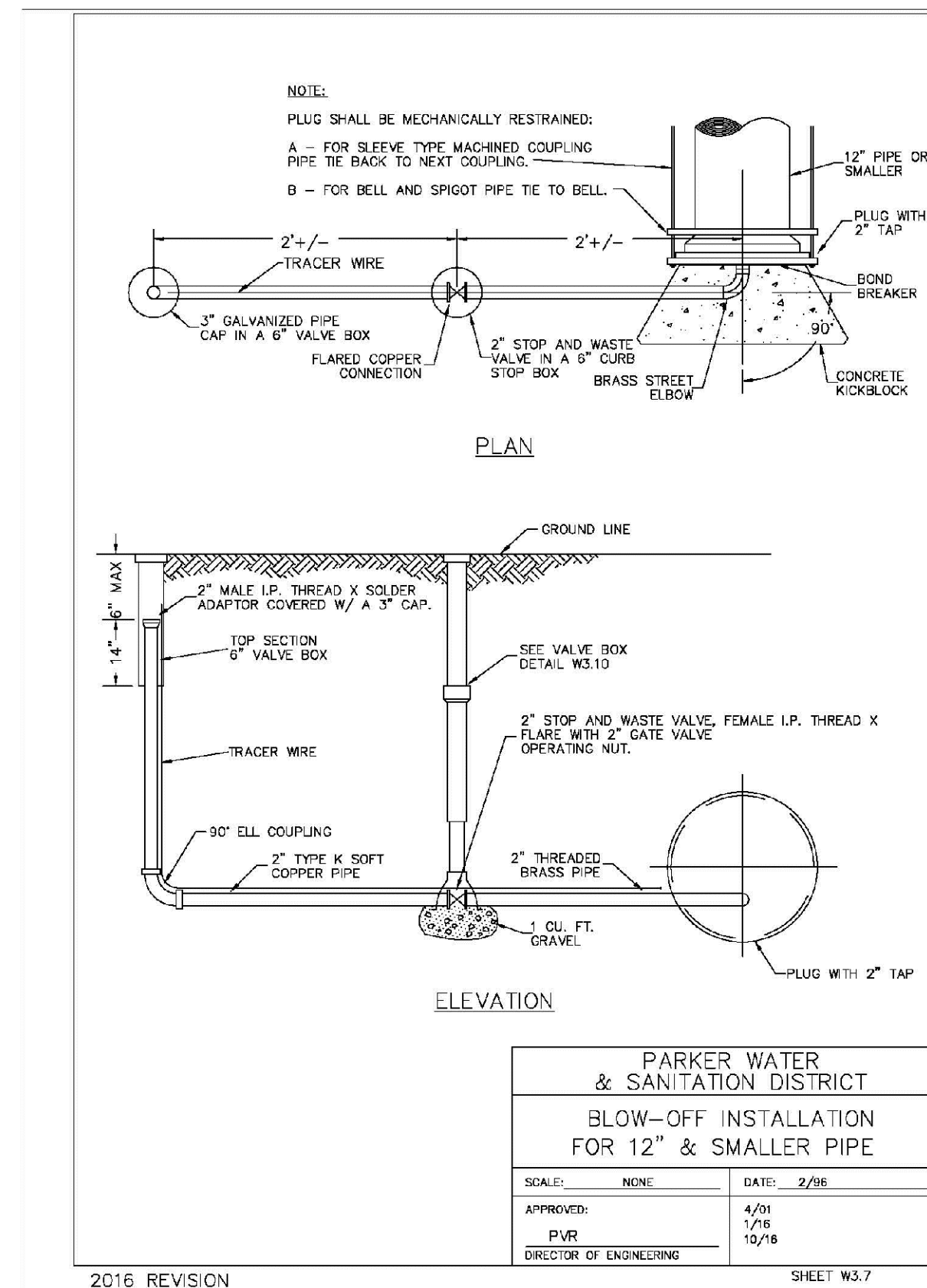
PARKER WATER & SANITATION DISTRICT STUB-OUT CONFIGURATIONS	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.5



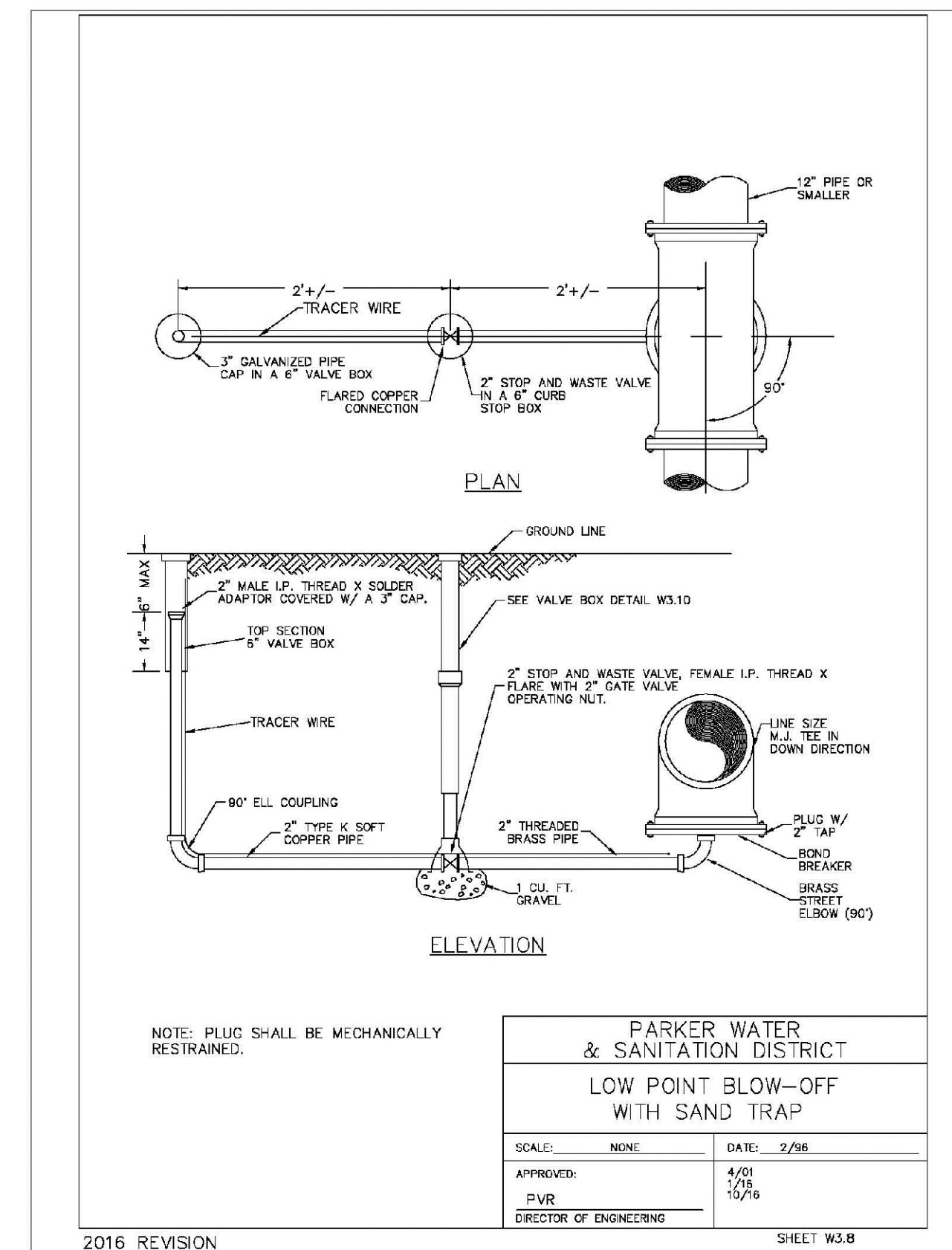
PARKER WATER & SANITATION DISTRICT AIR AND VACUUM VALVE INSTALLATION	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.6



PARKER WATER & SANITATION DISTRICT BLOW-OFF INSTALLATION FOR 12" & SMALLER PIPE	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.7



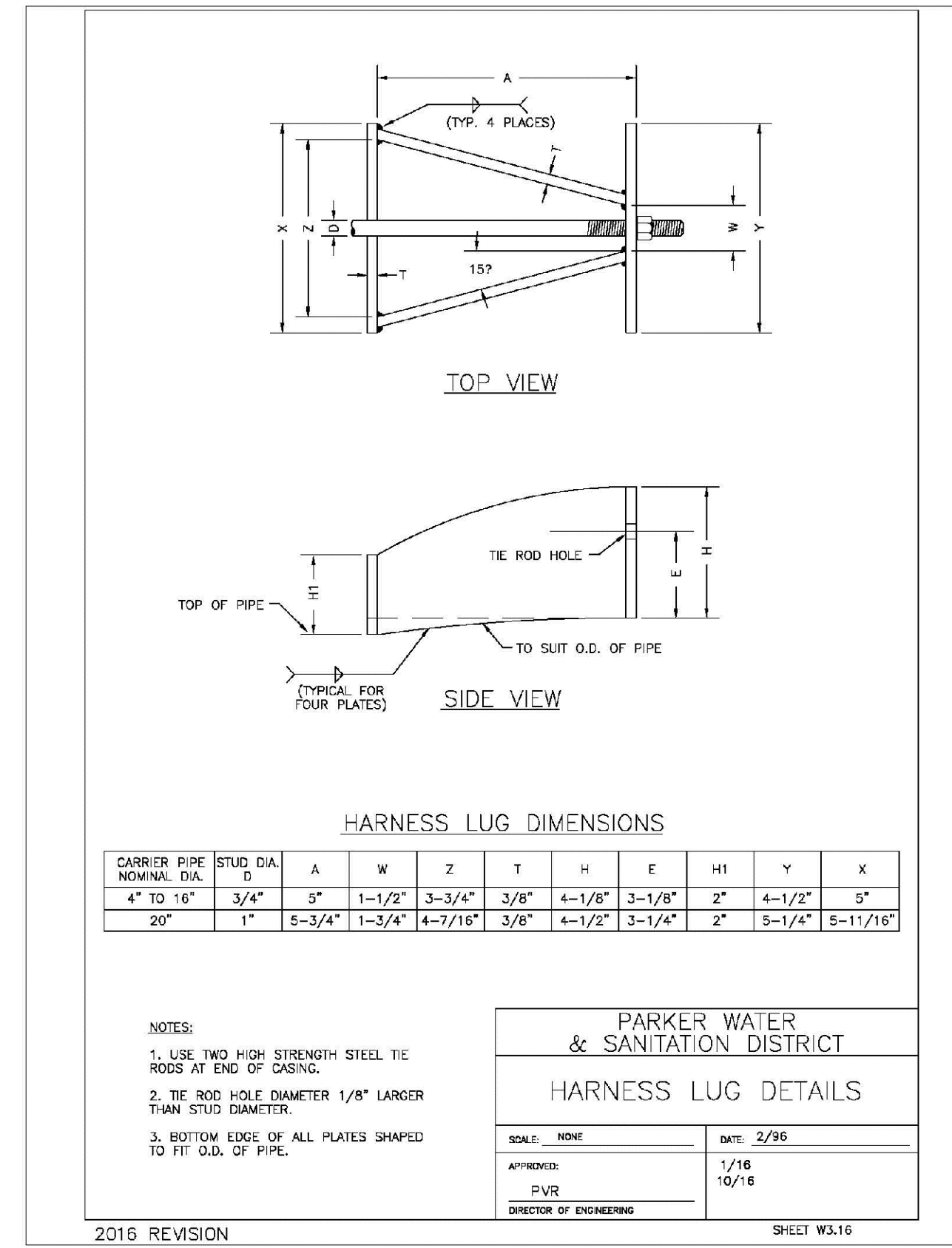
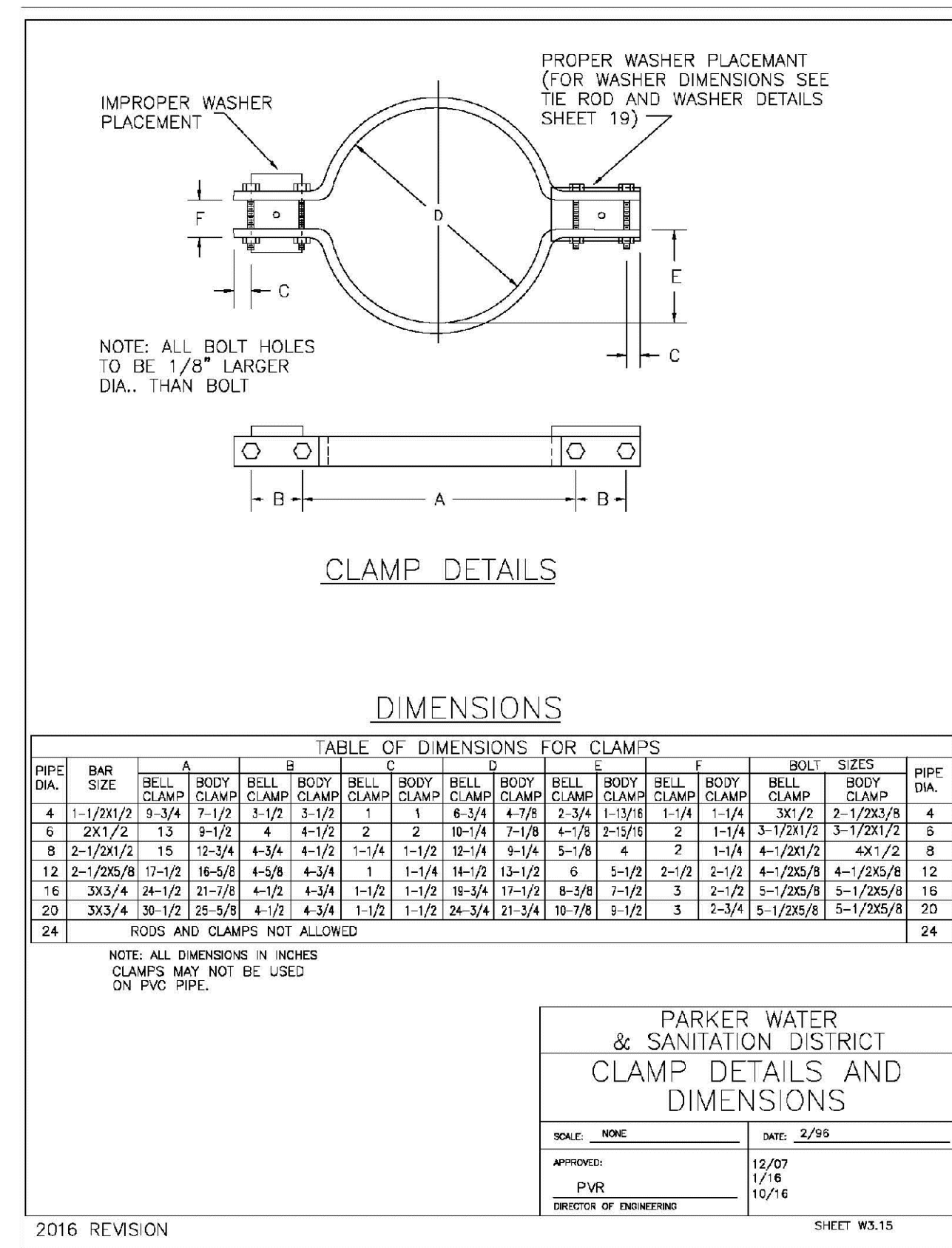
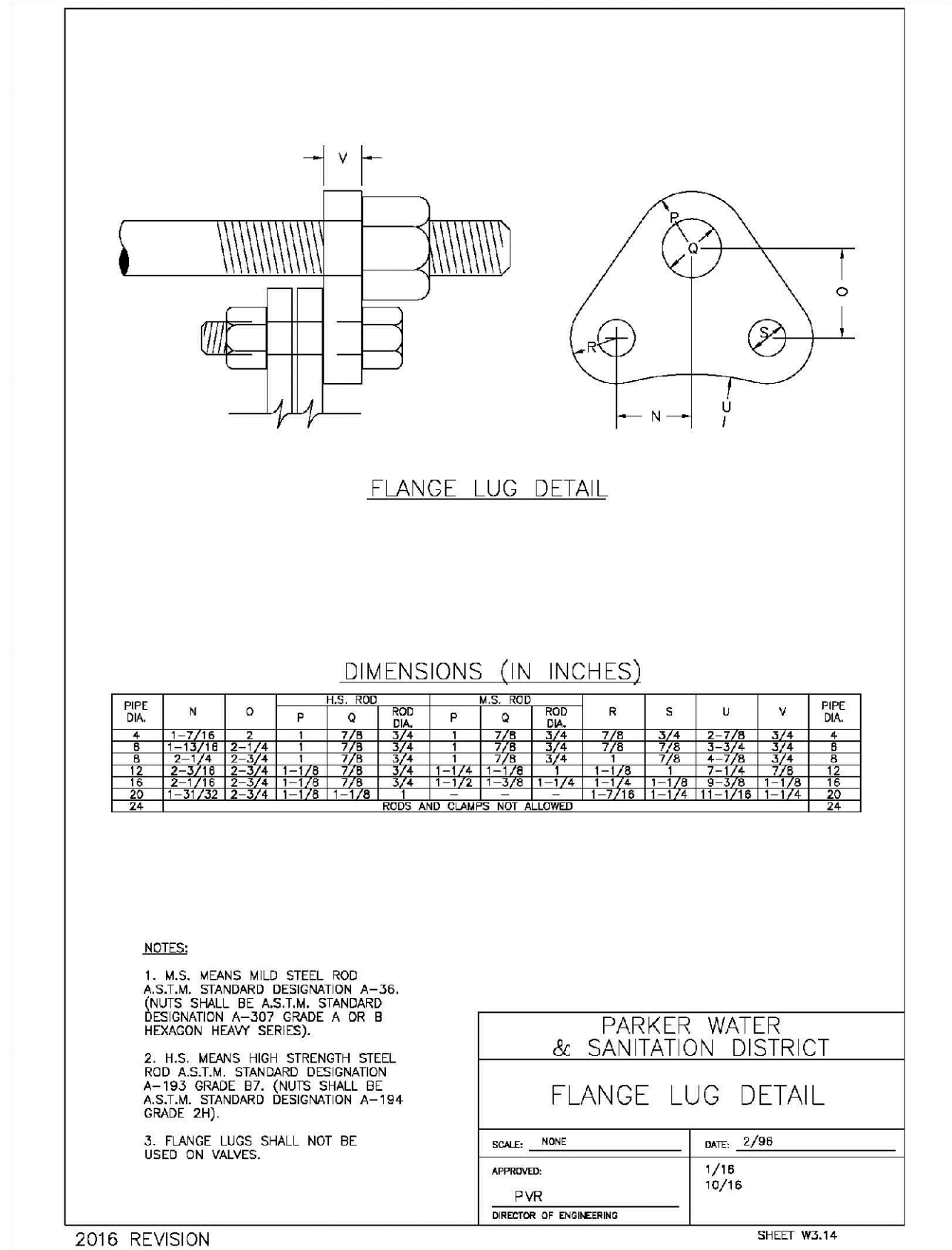
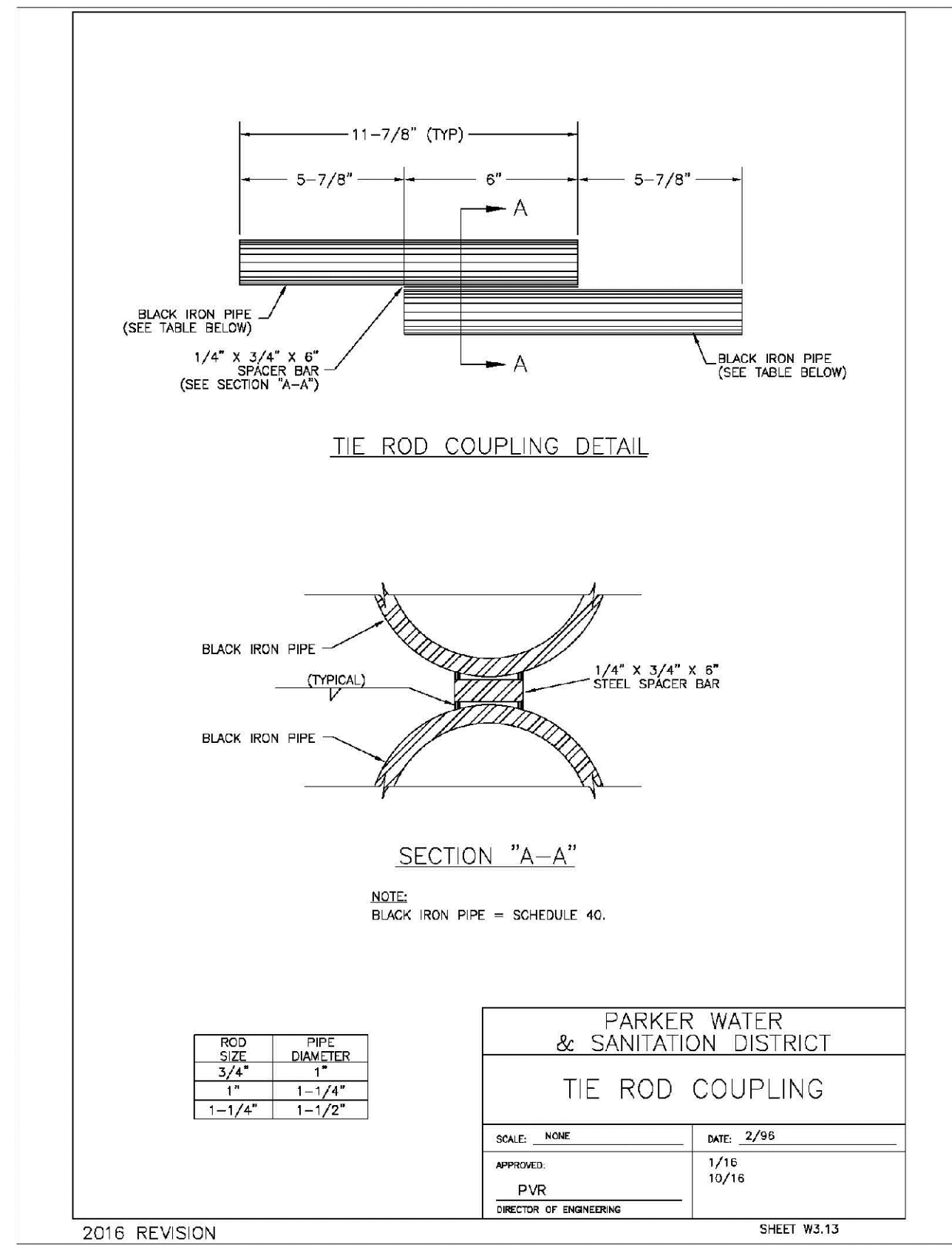
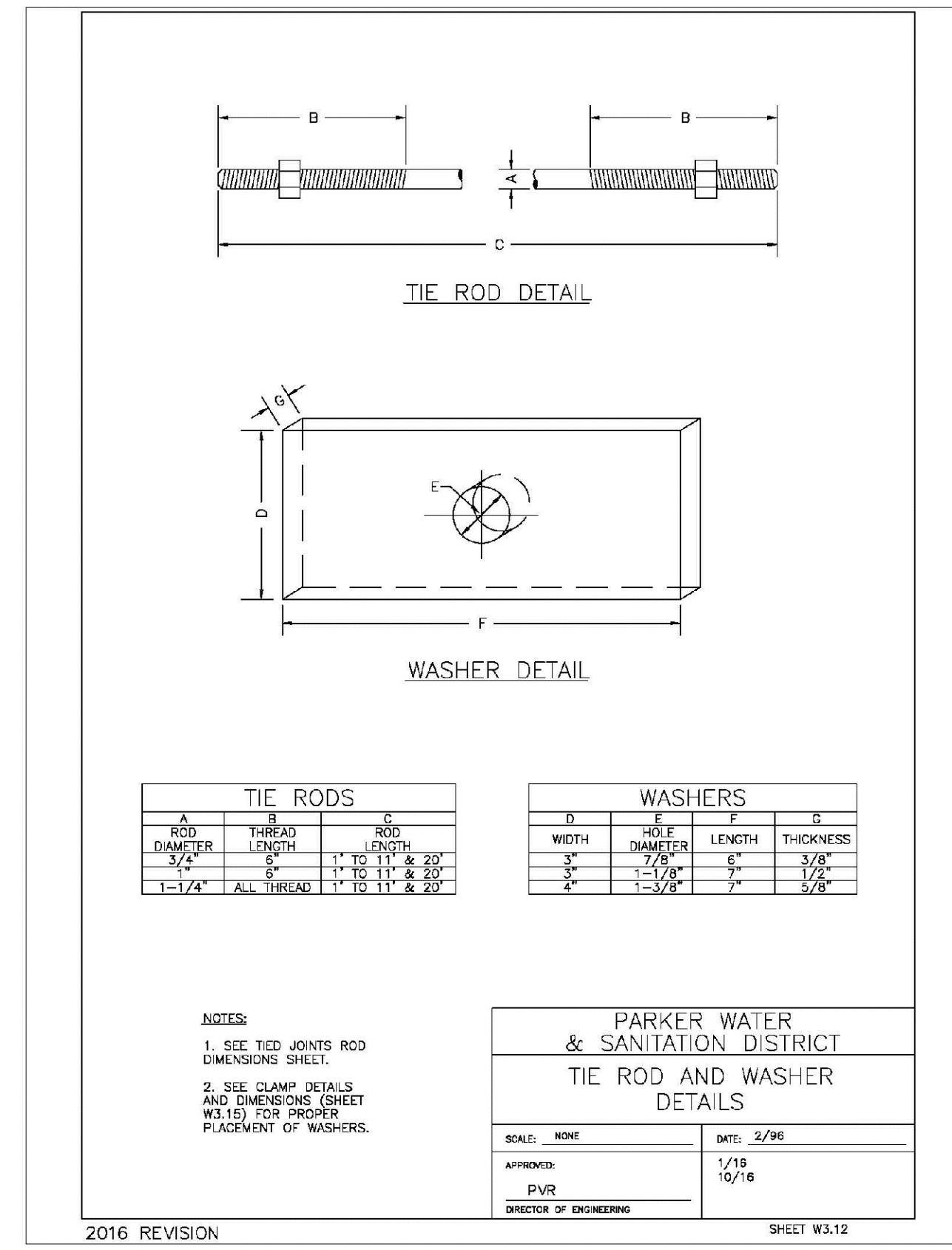
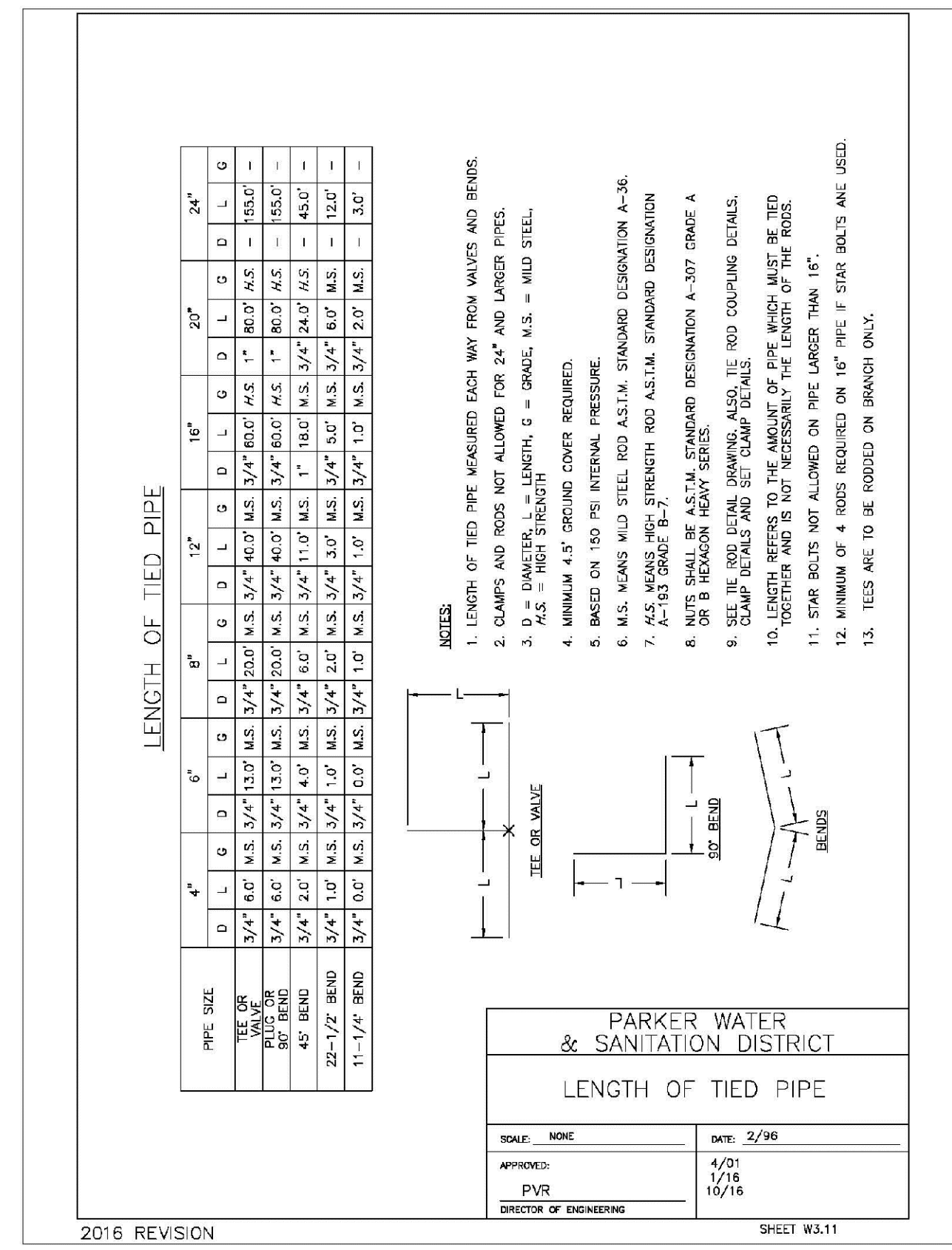
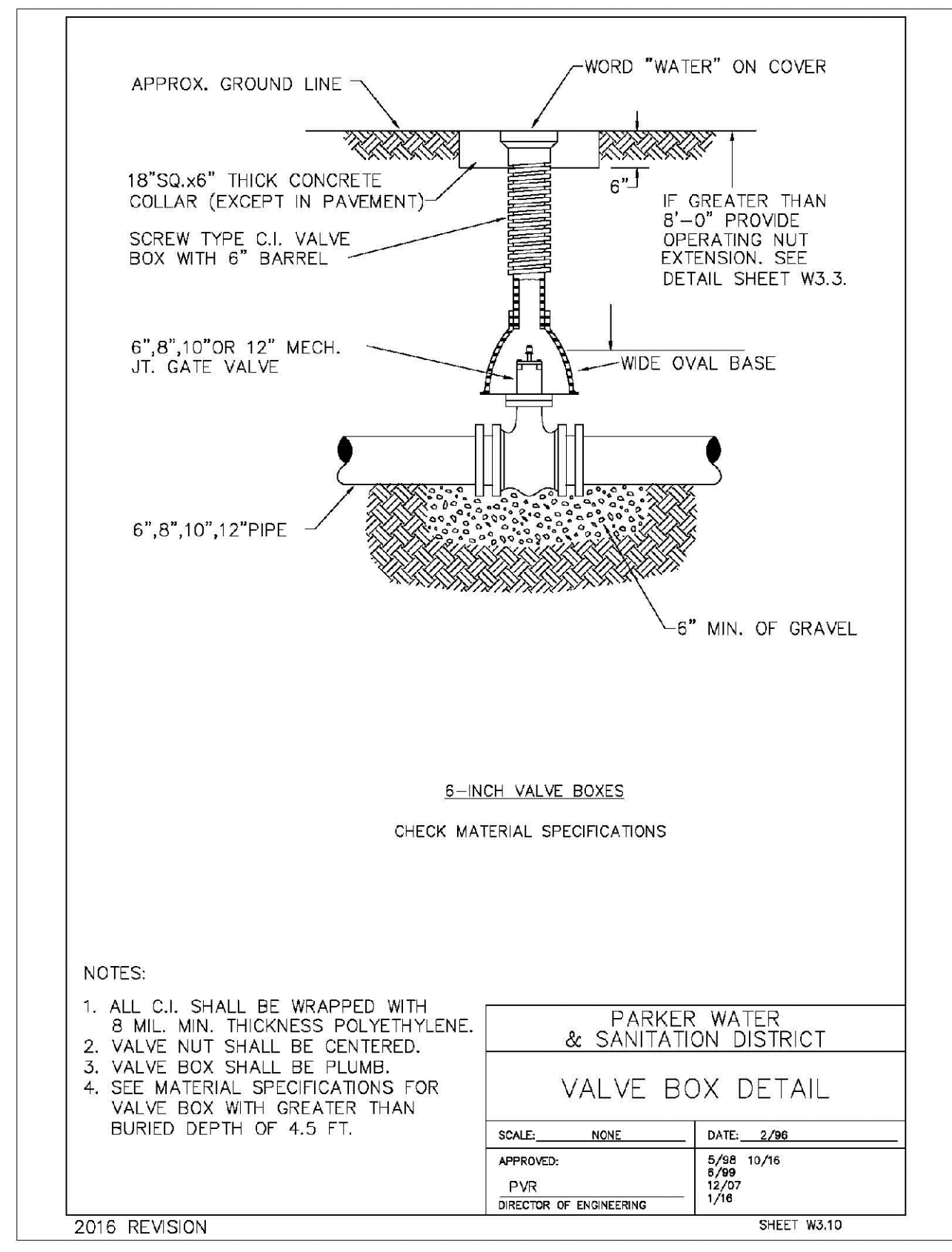
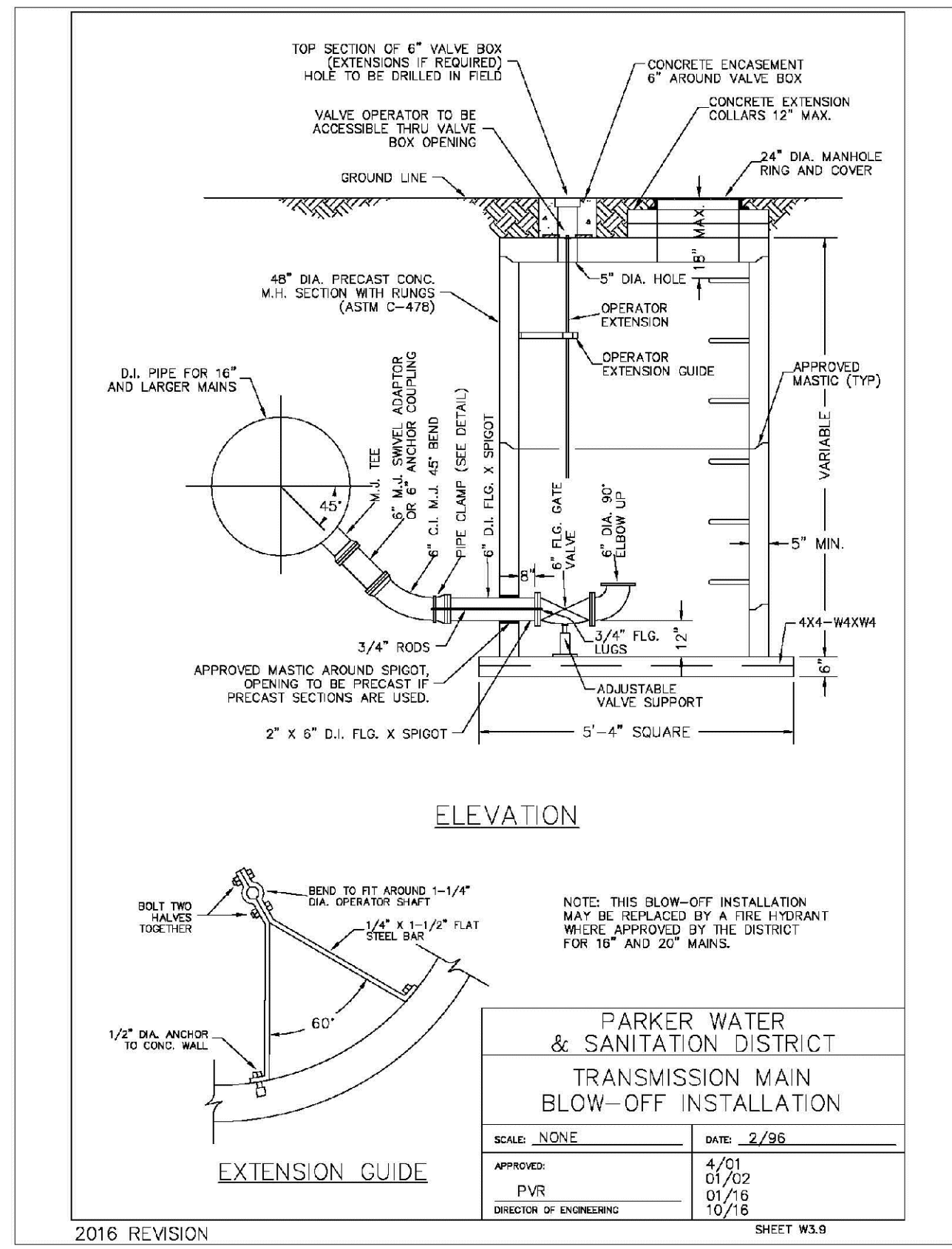
PARKER WATER & SANITATION DISTRICT LOW POINT BLOW-OFF WITH SAND TRAP	
SCALE: NONE	DATE: 2/96
APPROVED: PVR	DATE: 10/16
DIRECTOR OF ENGINEERING	

2016 REVISION SHEET W3.8

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				PROJECT: TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER DETAILS	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112				



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Fax: (720) 482-9546

CVL CONSULTANTS

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: RHR
CHECKED BY: BPW
DATE: JUNE 2016

SHEET NUMBER: 17

No.	Revisions	Date	Init.	Appr.	Date

MECHANICAL JOINT RESTRAINT

WEDGE DETAIL BOLT HOLE DETAIL

NOMINAL PIPE SIZE	NO. OF BOLTS	NO. OF WEDGES	K2 INCHES	K1 INCHES	F INCHES	M INCHES
4"	2	2				
6"	3	3	11.12	9.5	7.00	0.88
8"	4	4	13.37	11.75	8.75	1.00
10"	5	5	15.62	14.00	11.20	1.00
12"	6	6	17.88	16.25	13.30	1.25
4"	4	2				
6"	5	3	11.12	9.5	7.00	0.88
8"	6	4	13.37	11.75	9.75	1.00
10"	7	5	15.62	14.00	11.20	1.00
12"	8	6	17.88	16.25	13.30	1.25

NOTES:
1. DIMENSIONS FOR 16" AND 20" D.I. PIPE NOT SHOWN.

PARKER WATER & SANITATION DISTRICT
MECHANICAL JOINT RESTRAINT DETAILS

SCALE: NONE DATE: 2/96

APPROVED: 2/90
PVR 12/07
DIRECTOR OF ENGINEERING 1/16

2016 REVISION SHEET W3.17

11-1/4", 22-1/2", 45" & 90" BENDS

DEAD END TEE

TYPICAL CROSS SECTION

SIZE OF PIPE	11-1/4" BENDS	22-1/2" BENDS	45" BENDS	90" BENDS	TEE OR DEAD END
4"	1.00	1.20	1.00	1.80	1.50
6"	1.00	1.45	1.25	2.00	2.00
8"	1.00	1.70	1.50	2.25	2.25
10"	1.00	1.95	1.75	2.50	2.50
12"	1.00	2.20	2.00	2.75	2.75
14"	1.00	2.45	2.25	3.00	3.00
16"	1.00	2.70	2.50	3.25	3.25
18"	1.00	2.95	2.75	3.50	3.50
20"	1.00	3.20	3.00	3.75	3.75
24"	1.00	3.70	3.50	4.25	4.25

MINIMUM BEARING SURFACE AREA (IN SQUARE FEET)

NOTES:
1. ALL VALVES, TEES, BENDS AND PLUGS SHALL BE RESTRAINED AND KICKBLOCKED.
2. WATER HAMMER: 1" C 1/2", 16", 20" AND 24" WATER HAMMER = 70 PSI.
3. BASED ON 150 PSI PIPE PRESSURE.
4. SOIL BEARING CAPACITY = 3,000 LBS./SQ. FT.

PARKER WATER & SANITATION DISTRICT
CONCRETE KICKBLOCKS BEARING SURFACES AND INSTALLATION

SCALE: NONE DATE: 2/96

APPROVED: 4/01
PVR 1/16
DIRECTOR OF ENGINEERING 10/16

2016 REVISION SHEET W3.18

HALF PLAN STANDARD LIFTING SLOT DETAIL

24" DIAMETER RING AND COVER

NOTES:
1. Coating Specifications: ASTM A-48 With a Minimum Tensile Strength of 20 KSI (Class 20)
2. All Castings to be Dipped in Asphalt Base Coat (Or Approved Lead)

PARKER WATER & SANITATION DISTRICT
24" DIAMETER RING AND COVER

SCALE: NONE DATE: 6/26

APPROVED: 12/07
PVR 1/16
DIRECTOR OF ENGINEERING 10/16

2016 REVISION SHEET W3.19

ACCESS MANHOLE

ACCESS MANHOLE AND AIR VALVE ASSEMBLY

NOTES:
1. USE 2" AIR VALVE ASSEMBLY ON 30" OR SMALLER PIPES.
2. RESIDENTIAL ASSEMBLY MAY BE USED IN RESIDENTIAL AREAS ONLY (SEE DETAIL SHEET W6.3).
3. SEE SHEET W3.6 FOR CONCRETE MANHOLE BASE BEAMS AND AIR/VACUUM VALVE DETAILS.

PARKER WATER & SANITATION DISTRICT
ACCESS MANHOLE ASSEMBLY

SCALE: NONE DATE: 2/96

APPROVED: 4/01
PVR 1/16
DIRECTOR OF ENGINEERING 10/16

2016 REVISION SHEET W3.20

STANDARD TRENCH SECTION

STREET CUT PATCH

PIPE DIAMETER	MINIMUM WIDTH	MAXIMUM WIDTH
4"	1'-4"	2'-4"
6"	1'-6"	2'-6"
8"	1'-8"	2'-8"
10"	2'-0"	3'-0"
12"	2'-2"	3'-2"
14"	2'-4"	3'-4"
16"	2'-6"	3'-6"
18"	2'-8"	3'-8"
20"	3'-0"	4'-0"
24"	3'-4"	4'-4"

PARKER WATER & SANITATION DISTRICT
TYPICAL TRENCH SECTION PIPE PROTECTION

SCALE: NONE DATE: 2/96

APPROVED: 5/98
PVR 2/02
DIRECTOR OF ENGINEERING 10/16

2016 REVISION SHEET W4.1

PIPE BEDDING

(a) Installation of Bedding and Pipes: After completion of the trench excavation and proper preparation of the foundation, six inches (6") of bedding material shall be placed on the trench bottom for support under the pipe. Bed holes shall be dug deep enough to provide a minimum of two inches (2") of clearance between the soil and bedding material. All pipe shall be installed in such a manner as to insure full support of the pipe barrel over its entire length. After the pipe is adjusted for line and grade, and the joint is made, the bedding material shall be carefully placed and tamped under the fullness of the pipe and in the previously dug bed holes.

(b) Bedding Material: The bedding material shall be a clean well-graded sand or screenings sand and shall conform to the following limits when tested by means of laboratory sieves:

Sieve Size	Total Percent Passing by Weight
3/8 inch	100
No. 4	70-100
No. 6	35-83
No. 16	20-80
No. 30	5-60
No. 50	2-30
No. 100	1-10
No. 200	0-3

PARKER WATER & SANITATION DISTRICT
PIPE BEDDING

SCALE: NONE DATE: 2/96

APPROVED: 5/98
PVR 2/02
DIRECTOR OF ENGINEERING 10/16

2016 REVISION SHEET W4.2

PLAN VIEW PROFILE

TYPICAL SECTION

WATERLINE ENCASEMENT

NOTES:
1. ALL CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3,000 PSI USING TYPE I PORTLAND CEMENT AND 3/4" AGGREGATE. ALL CONCRETE SHALL HAVE 5-7% ENTRAINED AIR CONTENT AND A MAXIMUM SLUMP OF 4".
2. ALL REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60.
3. ALL REINFORCEMENT SHALL HAVE 2" MIN. CONCRETE COVER.
4. THE SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY PRIOR TO FORMING THE STRUCTURE.
5. PIPE SHALL BE WRAPPED WITH FELT LAYER BEFORE ENCASEMENT.

PARKER WATER & SANITATION DISTRICT
WATERLINE ENCASEMENT

SCALE: NONE DATE: 5/26

APPROVED: 1/16
PVR 10/16
DIRECTOR OF ENGINEERING

2016 REVISION SHEET W4.3

PLAN FOR PERPENDICULAR CROSSING PLAN FOR ANGLE CROSSING

PROFILE

FORMULA FOR FINDING C:
 $C = B + (2)(1.5) \left[\frac{B}{2} + A + F \right]$

FORMULA FOR FINDING L:
 $L = \frac{C}{\sin \phi}$

PARKER WATER & SANITATION DISTRICT
BORED CROSSINGS BENEATH CONDUITS

SCALE: NONE DATE: 2/26

APPROVED: 2/00
PVR 1/16
DIRECTOR OF ENGINEERING 10/16

2016 REVISION SHEET W4.4

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Fax: (720) 482-9548

HR 935 LLC
7353 South Alton Way
CENTENNIAL, CO 80112

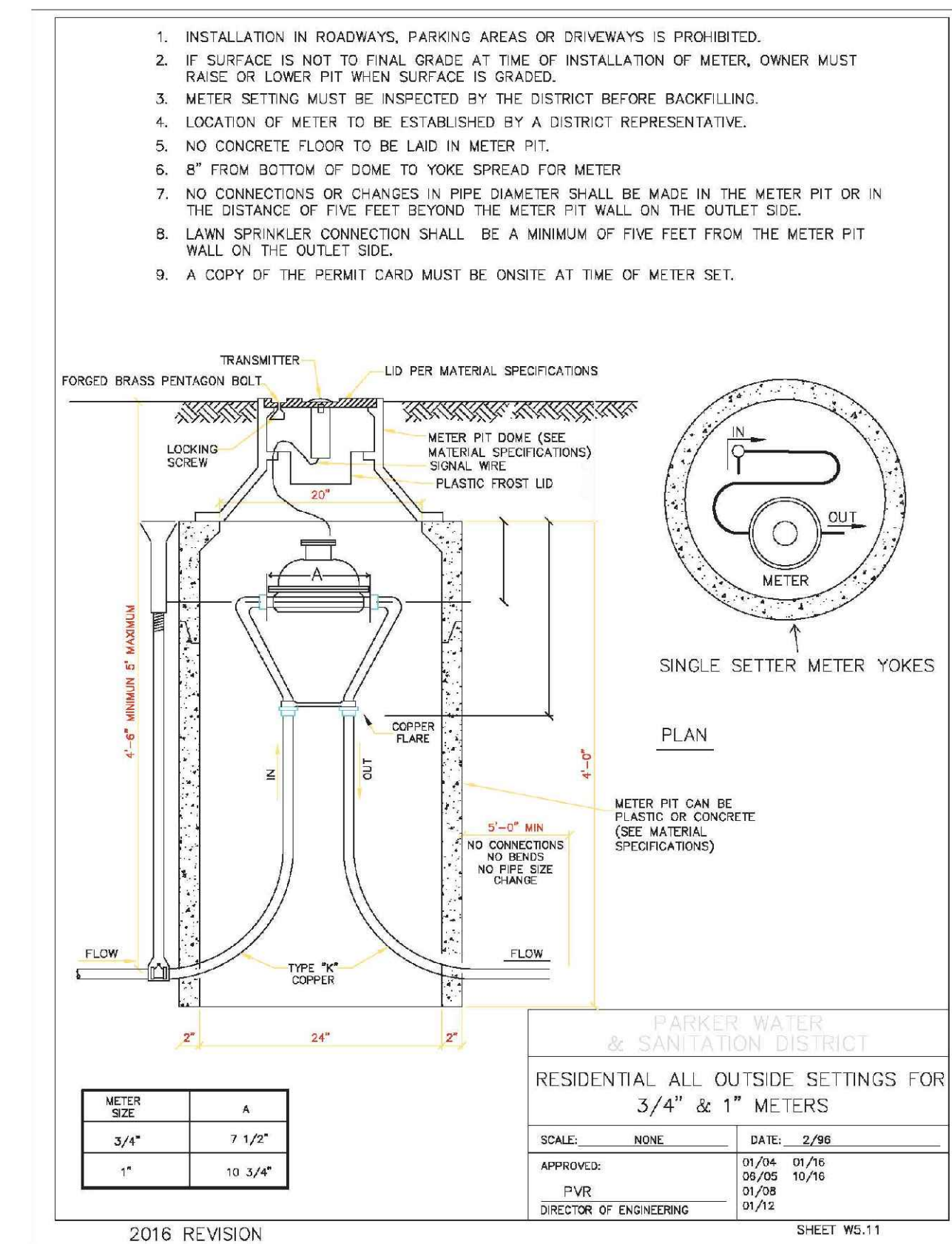
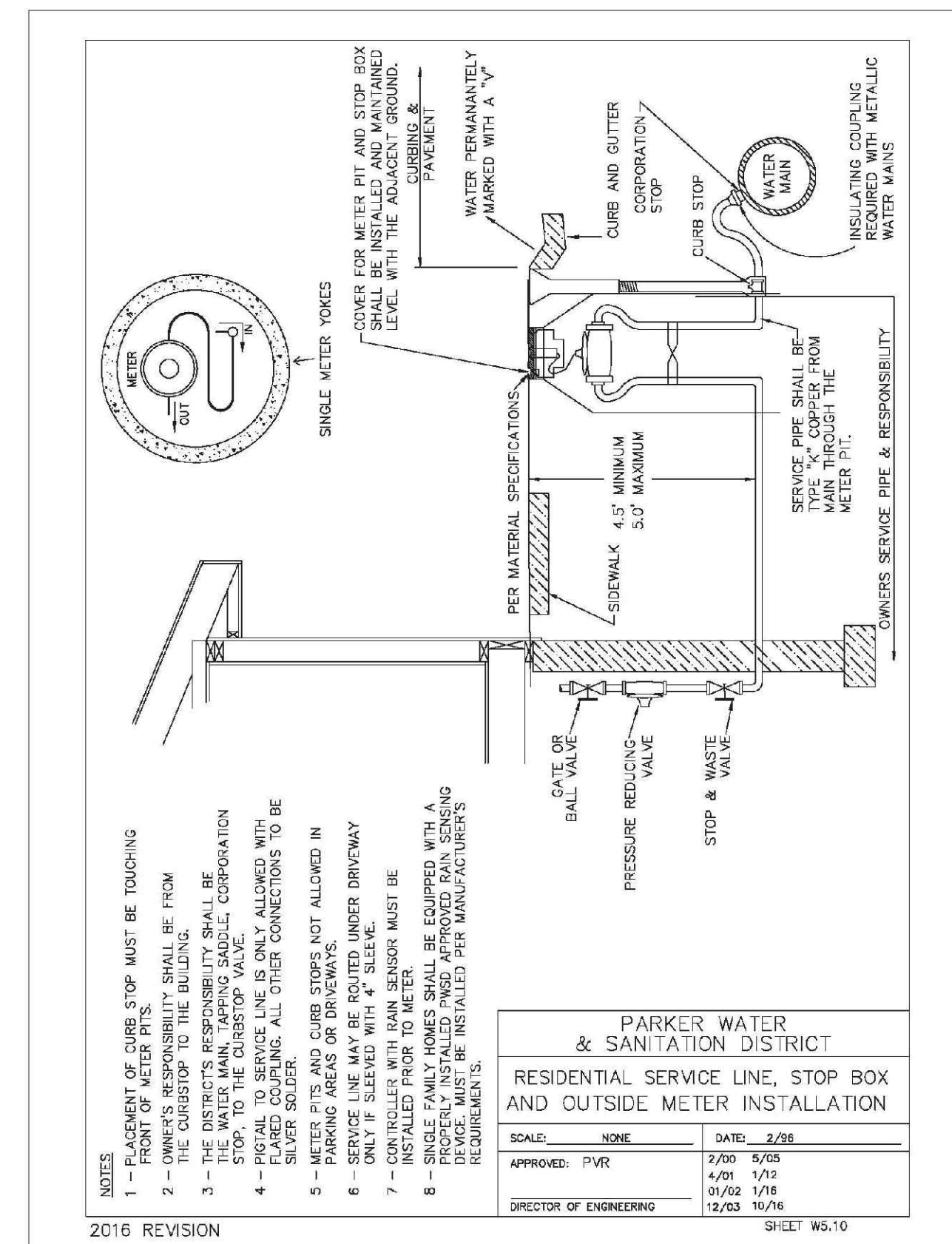
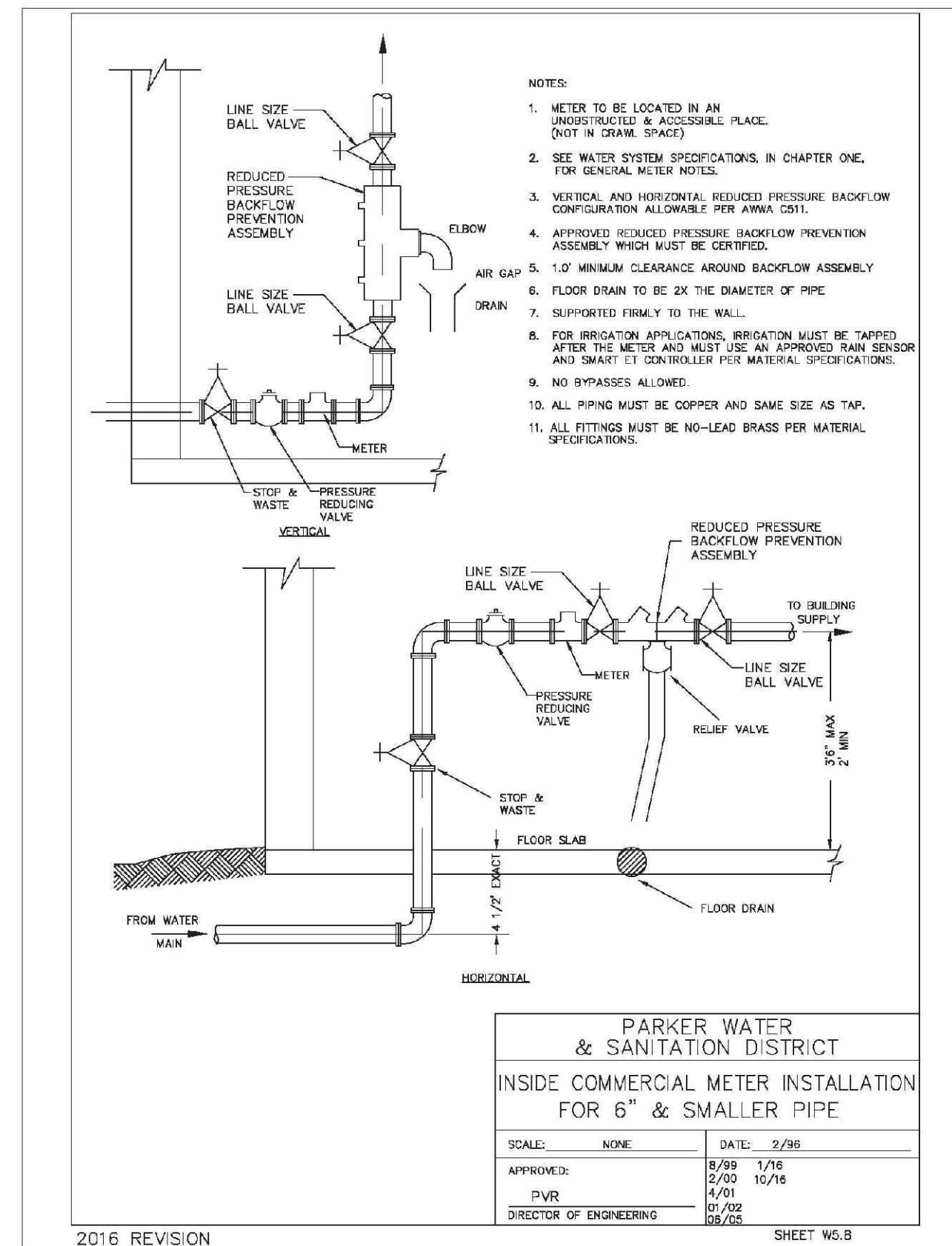
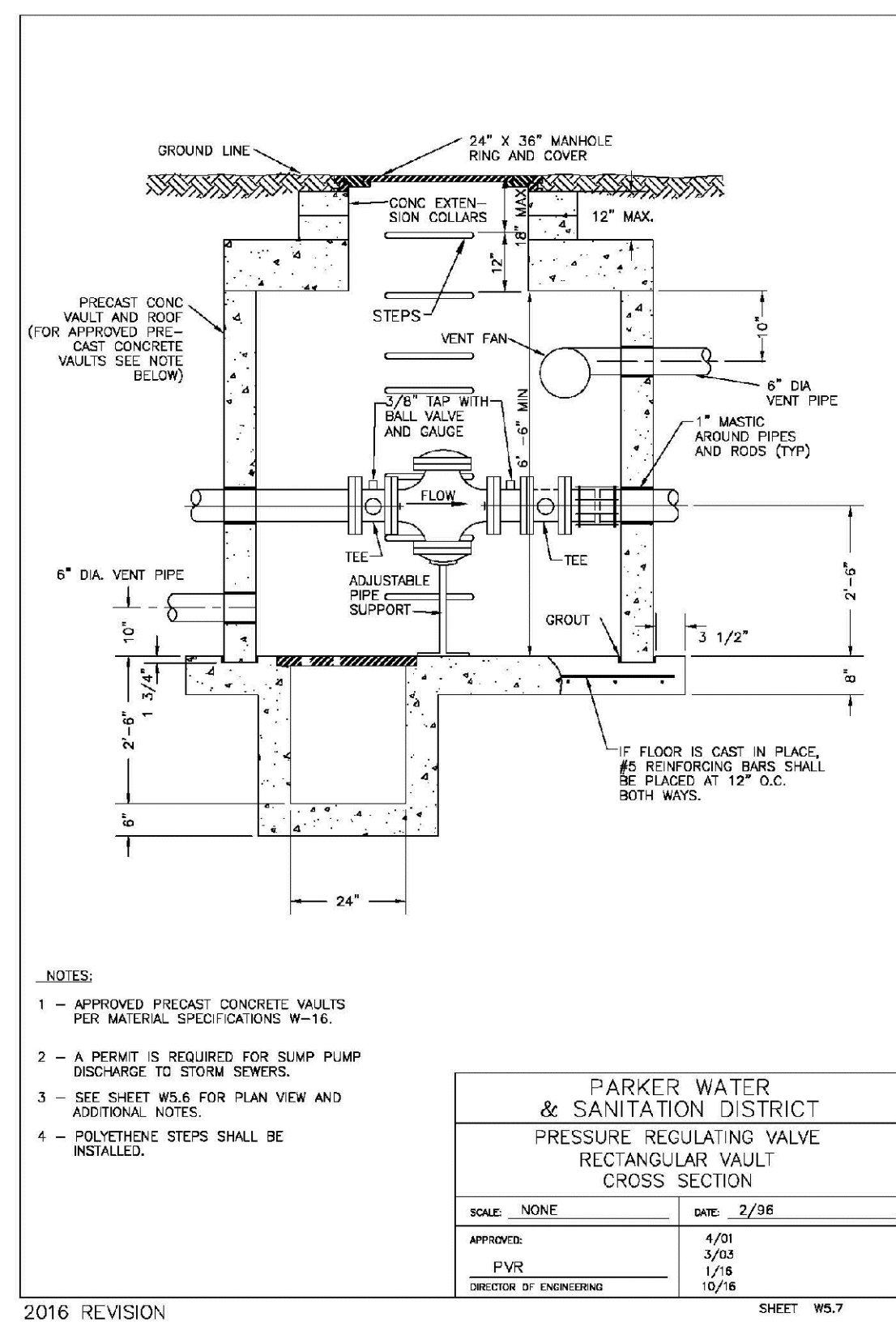
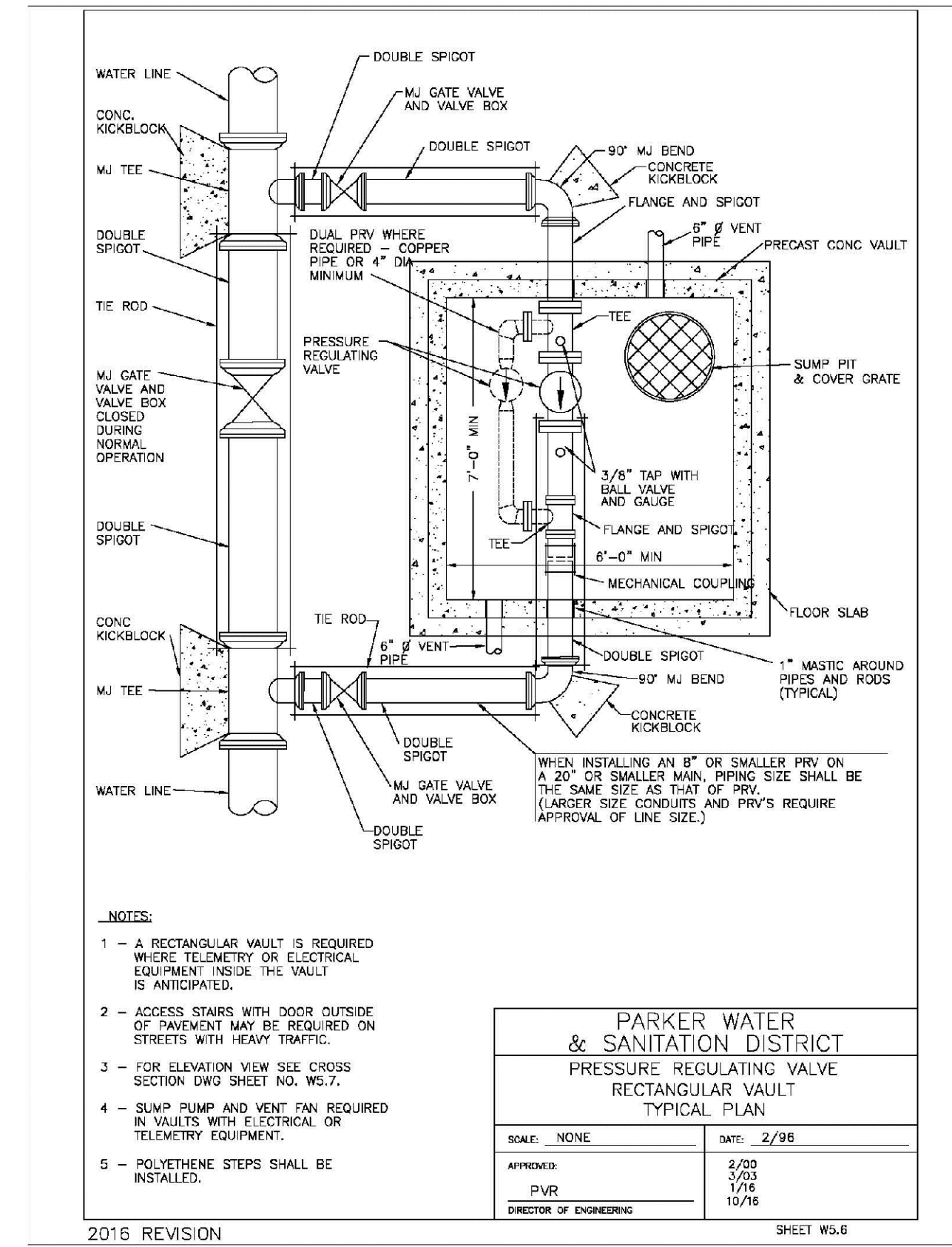
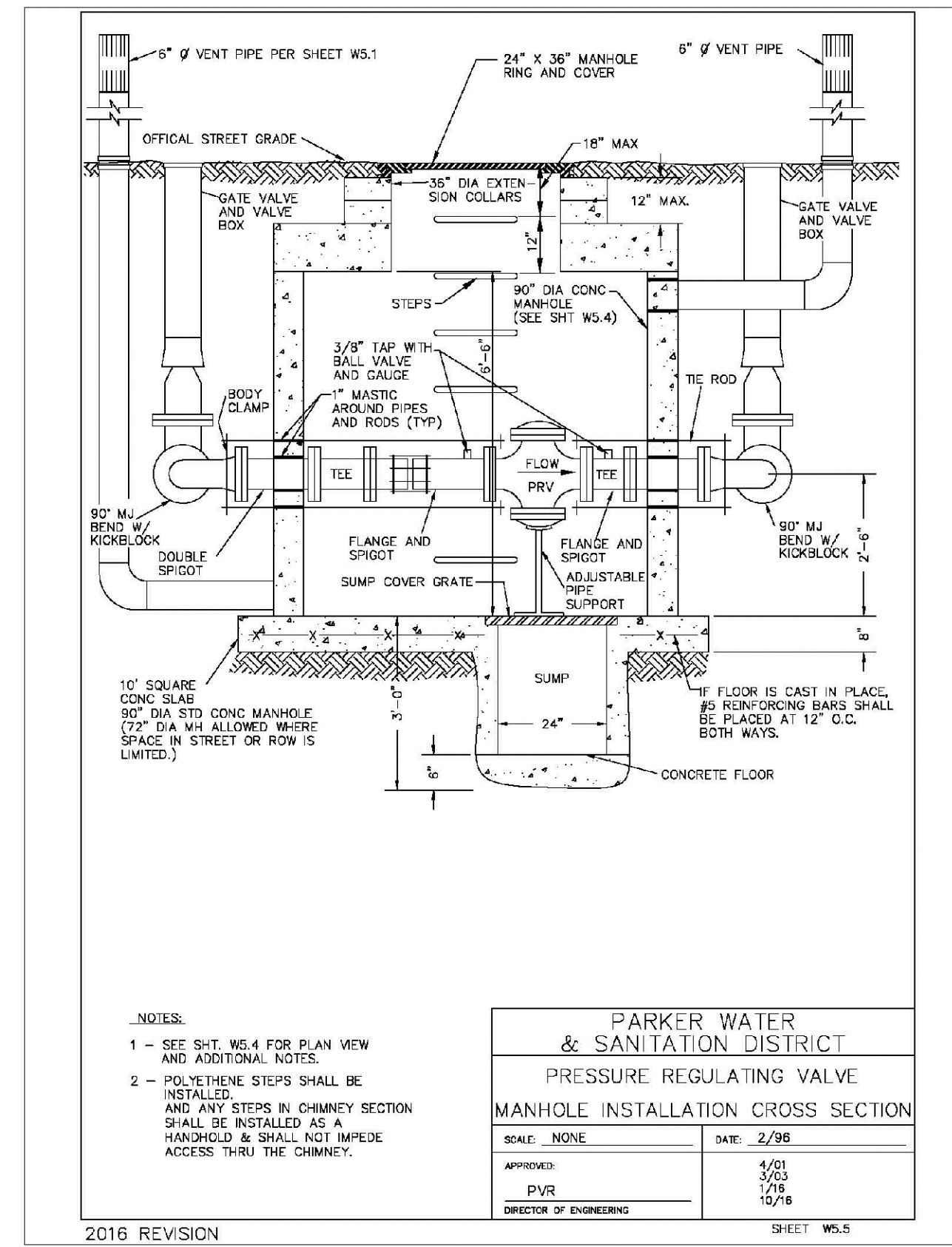
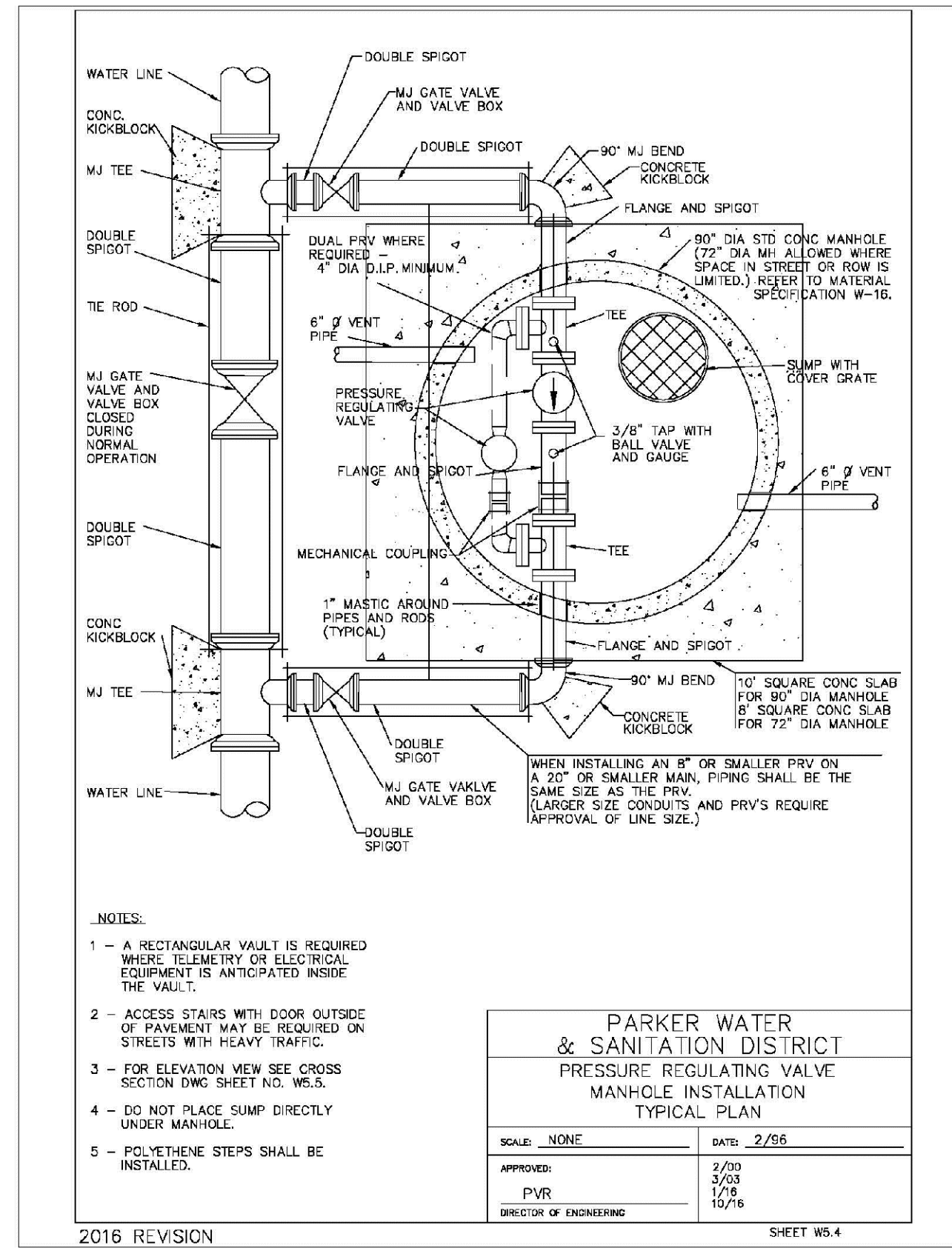
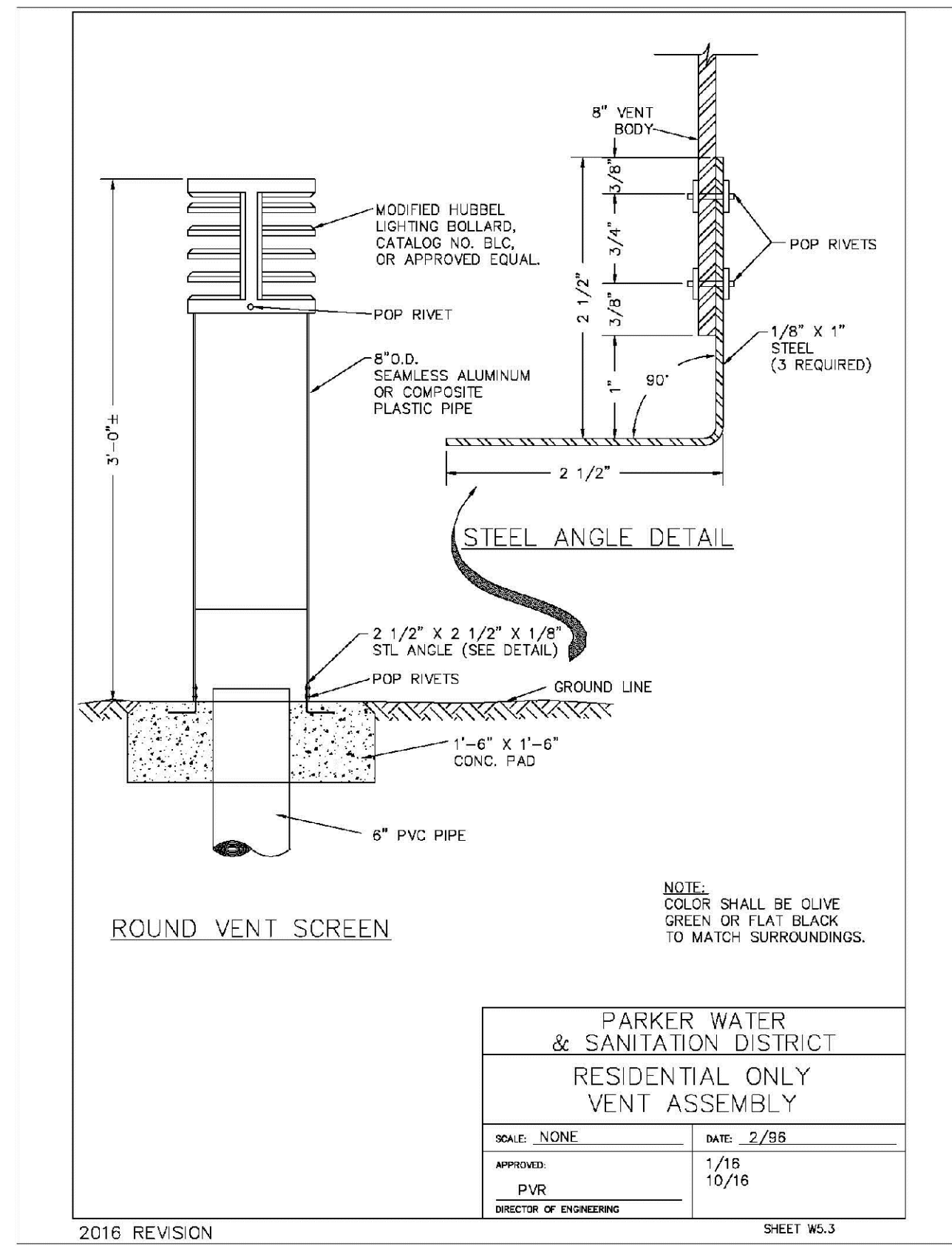
TRAILS AT CROWFOOT
FILING 15 CONSTRUCTION DRAWINGS
WATER DETAILS

SCALE: AS SHOWN
FILE NO: 8130283701

DRAWN BY: RHR
CHECKED BY: BPW
DATE: JUNE 2016

SHEET NUMBER: 18

Revisions: No. Date Init. Appr. Date



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				TRAILS AT CROWFOOT FILING 15 CONSTRUCTION DRAWINGS WATER DETAILS	HR 935 LLC 7353 South Alton Way CENTENNIAL, CO 80112	No.			

